# Diabetes, Level 1

## Capable Caregiving for Diabetes Care



Aging and Long-Term Support Administration



This curriculum was developed from feedback and input gathered from stakeholders across the state. Primary stakeholder groups included facility owners/providers, managers, supervisors, caregivers, trainers, families, clients/residents, DSHS staff, long-term care ombuds and advocacy group representatives.

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## **Module 1: Introduction to Diabetes**

## **Lesson 1: Understanding Diabetes**

The caregiver will define types of diabetes and identify signs and risk factors associated with diabetes.

## **Lesson 2: Prevention**

The caregiver will recognize methods to prevent or delay diabetes.

## **Lesson 3: Living with Diabetes**

The caregiver will identify various challenges of living with diabetes

# **Lesson 1 Understanding Diabetes**

### **Objective:**

The caregiver will define types of diabetes and identify signs and risk factors associated with diabetes.

### **Overview**

Diabetes is a major health concern in the United States. Many American adults have diabetes or are at risk for getting it. You probably know or care for someone who has diabetes or are at risk of getting it. Diabetes is a chronic illness that can be challenging and life-changing.

#### In 2017 in Washington state:

- Two million adults (1 in 3) had prediabetes
- 685,570 people (1 in 11) had diabetes
- Diabetes was the primary diagnosis contributing to 125,032 hospitalizations
- Diabetes is the seventh leading cause of death causing 6,046 deaths

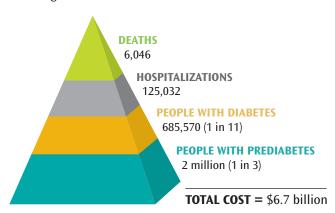
#### In the same year:

- 41,470 new cases of diagnosed diabetes among adults
- Around 5% with diagnosed diabetes have Type 1
- The remaining 95% have Type 2.

The impact of diabetes in Washington is extensive and expensive. Some demographics have a higher burden of diabetes. Older adults are more likely than younger adults to have diabetes with co-existing conditions. Understanding how diabetes works, its signs and its risk factors will help you support the individual with these challenges and changes.

# **Snapshot of Diabetes in Washington state**

The Washington State Department of Health Diabetes Data Supplement 2019 listed the following data for Washington state in 2017:



DOH Diabetes Data Supplement 2019

#### **Medical and self-care**

- A majority of adults with diabetes statewide were getting preventative treatment.
- Around 20% 40% of adults with diabetes statewide were not receiving certain recommended preventative medical.

# Coexisting conditions and complications

• Coexisting conditions increase the likelihood of complications related to diabetes. (See page 33 for more information on coexisting conditions.)

### **Risk factors**

 In addition to those who already have diabetes, an estimated two million adults (or 1 in 3) had prediabetes. Three out of four adults with prediabetes were not aware of their condition.

## **Financial impact**

- The total estimated cost of diagnosed diabetes was \$6.7 billion.
- The average lifetime cost of caring for a person with Type 2 diabetes can range from \$55,000 to \$130,000.

## **Health disparities**

- Some groups or communities carried a higher burden of diabetes and diabetes-related poor health outcomes.
  - Gender: Males are more likely than females to have diabetes and experience increased diabetes-related hospitalizations and deaths.
  - Age: Adults age 65 years and older are more likely to have diabetes and co-existing conditions.
  - Race and Ethnicity: Communities of color (including non-Hispanic Blacks, Native Hawaiian and Pacific Islanders, American Indian/Alaskan Natives and Hispanics) are more likely than non-Hispanic whites to have diabetes.
  - Socioeconomic Status: Adults with lower incomes and levels of education are more likely to have diabetes. Adults with lower incomes are also less likely to be aware of having prediabetes.

## **More information**

To learn more about the prevalence of diabetes access the report listed below.

Diabetes Data Supplement from Washington State Department of Health, Washington State Department of Social and Health Services and Washington State Health Care Authority, December 2019.

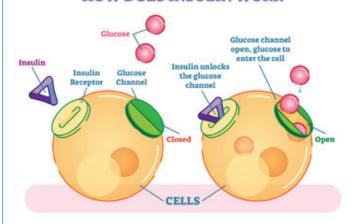
https://www.doh.wa.gov/Portals/1/Documents/Pubs/140-222-DiabetesDataSupplement2019.pdf

Do you currently know or care for someone who has diabetes or who is at risk of getting diabetes? Reflect on how this diagnosis may affect the individual.

### What Is Diabetes?

Diabetes Mellitus or Diabetes refers to a complex group of diseases. This group of diseases relate to harmfully high blood glucose (also known as glucose, blood sugar or sugar). Diabetes is a chronic condition; there is no cure currently. Diabetes is manageable.

#### HOW DOES INSULIN WORK



Many parts of the body need glucose. Some of the body's glucose must stay in the blood. Some of the body's glucose must leave the blood and move to other parts of the body where needed or stored for later use.

When a person has diabetes, too much of the body's glucose stays in the blood.

Diabetes is the condition in which the body does not properly process food for use as energy. Most of the food we eat turns into glucose for our bodies to use for energy. The pancreas, which is an organ that lies near the stomach, makes a hormone called insulin. Insulin helps glucose get into the cells of our bodies. Diabetes causes the body to not make enough insulin or not use its own insulin as well as it should. This causes glucose to build up in the blood.

Diabetes can cause serious health complications including heart disease, blindness, kidney failure and poor circulation to extremities. Diabetes is the seventh leading cause of death in the United States.

More information on these health complications and types of diabetes follow in this lesson.

Name other words for blood sugar:

- 1.
- 2.
- 3.

### What Is Prediabetes?

Prediabetes is a condition when blood glucose levels are higher than normal, but not high enough for diabetes.

People with prediabetes have an increased risk of developing Type 2 diabetes, heart disease and stroke.

The Centers for Disease Control and Prevention (CDC) offers a Prediabetes Risk which uses a point system to determine your risk and looks at the following factors:

#### Age group

Risk for prediabetes increases with age.

#### Gender

Men have a higher risk for prediabetes than women do.

#### **Diagnosis of gestational diabetes**

Women previously diagnosed with gestational diabetes (diabetes that is developed during pregancy) have a higher risk for prediabetes.

#### Immediate family diagnosis of diabetes

If a mother, father, sister or brother have diabetes, then the risk for prediabetes increases.

#### Diagnosis of high blood pressure

A diagnosis of high blood pressure increases the risk for prediabetes.

### **Physical activity**

Lack of physical activity increases the risk of prediabetes.

#### **Weight category**

A higher weight to height ratio increases the risk of prediabetes.

Some activities may reduce the risk of diabetes and return blood sugars back to normal.

- · Maintaining a healthy weight
- · Eating healthy
- Physically activity

Take the risk test for Charli Hopper

Age: 67
Gender: Male

Gestational diabetes? No No family history of diabetes No high blood pressure Is not physically active

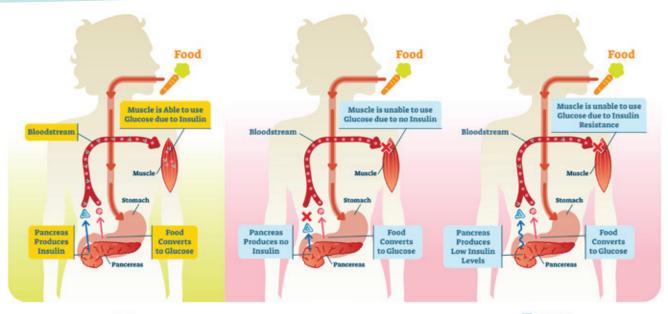
Height: 5'10" Weight: 178

Is Charli at an increased risk for having prediabetes and at a high risk for Type 2 diabetes?

What are ways that Charli can reduce his risk?

#### Take the risk test:

https://www.cdc.gov/diabetes/prevention/pdf/ Prediabetes-Risk-Test-Final.pdf



Healthy Type 1 Type 2

## **Types of Diabetes**

There are three main types of diabetes mellitus. Type 1, Type 2 and Gestational.

## **Type 1 diabetes**

Type 1 diabetes (previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes) may account for 5 to 10% of all diagnosed cases of diabetes.

In Type 1 diabetes:

- The body produces very little to no insulin.
- Insulin helps glucose to enter the cell to use as energy.
- People with Type 1 need to take insulin injections to manage blood sugar levels.



The risk factors for Type 1 diabetes are less defined than for Type 2 diabetes.

The exact cause is unknown, however Type 1 diabetes is an autoimmune disease in which the body mistakenly destroys the insulin-producing cells in the pancreas. Other possible causes are genetics and exposure to viruses and other environmental factors.

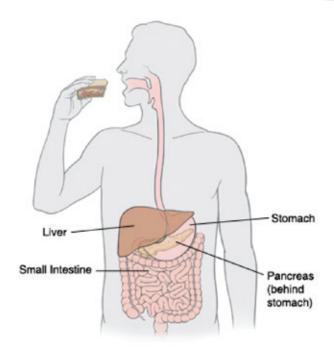
Type 1 diabetes is not preventable. Currently, there is no cure. Individuals with Type 1 diabetes require insulin therapy to regulate glucose levels. Having Type 1 diabetes may affect emotions, especially when combined with other risk factors such as: a traumatic brain injury (TBI) or mental health disorders.

### Type 2 diabetes

- In Type 2 diabetes, the body does not make enough insulin or does not use insulin well
- People with Type 2 often need to take oral medications or insulin
- Type 2 is the most common form of diabetes

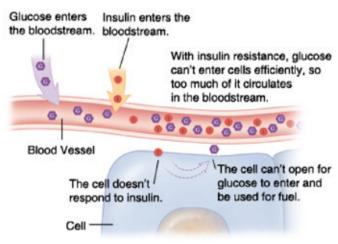
When the body is working normally, it digests food and uses it as fuel. This fuel supplies energy to the body's cells. Diabetes means the body is not able to use glucose effectively as fuel. Without treatment, diabetes can cause serious long-term health problems.

The digestive system converts dietary carbohydrates into a sugar called glucose. Some of this glucose is stored in the liver. Most of the glucose enters the bloodstream and travels to cells to be used as fuel.

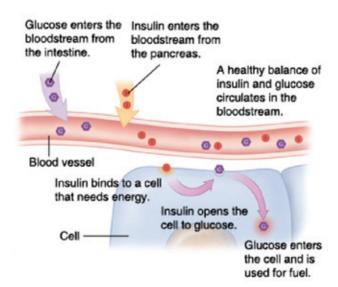


American Diabetes Association Understanding Type 2 Diabetes

Glucose needs the help of a hormone called insulin to enter the cells. Insulin is made in the pancreas. Insulin releases into the bloodstream in response to the presence of glucose in the blood. Insulin behaves like a key. When insulin reaches a cell, it attaches to the cell wall. This signals the cell to create an opening that allows glucose to enter the cell.



American Diabetes Association Understanding Type 2 Diabetes



American Diabetes Association Understanding Type 2 Diabetes

Type 2 diabetes was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes may account for 90 to 95% percent of all diagnosed cases of diabetes.

Early in Type 2 diabetes, the cells do not respond properly to insulin. Because of this, less glucose than normal moves into cells. This is called insulin resistance. In response, the pancreas makes more insulin.

Eventually, the pancreas cannot produce enough insulin to overcome insulin resistance. As less and less glucose enters cells, it builds up to a harmful level in the bloodstream. This is known as high blood sugar or hyperglycemia. The result is Type 2 diabetes. The cells become starved for energy, which can leave the individual feeling tired and rundown.

If high blood sugar is not controlled, blood vessels throughout the body become damaged. Prolonged high blood sugar affects organs, blood vessels and nerves. As a result, the risks of damage to the heart, kidneys, eyes and limbs increase.

Diabetes also makes other problems, such as high blood pressure and high cholesterol, more dangerous. Over time, people with uncontrolled high blood sugar have an increase in risk of disability or death.

Risk factors for Type 2 diabetes include:

- · Family history of diabetes
- · Decreased glucose tolerance
- Obesity
- Older age
- · Physical inactivity
- · Poor diet (processed foods)
- · Prior history of gestational diabetes
- Race/ethnicity (African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Pacific Islanders are at particularly high risk for Type 2 diabetes)
- Smoking
- Prediabetes

Read the risk factors listed above for type 2 diabetes. Discuss the risk factors that an individual might change for better health. Discuss how you might provide support to make these changes.

#### **Gestational diabetes**

Gestational diabetes is diabetes diagnosed for the first time during pregnancy (gestation).

Like other types of diabetes, gestational diabetes affects how cells use sugar (glucose). Gestational diabetes causes high blood sugar that can affect pregnancy and the baby's health.



- Gestational diabetes may occur when a woman is pregnant.
- Gestational diabetes raises a woman's risk of getting another type of diabetes, mostly Type 2, for the rest of her life.
- It raises her child's risk of being overweight and getting diabetes.

Gestational diabetes develops in 2 to 5% of all pregnancies. It usually disappears when pregnancy is over.

Gestational diabetes occurs more frequently in:

- African Americans
- Hispanic/Latino Americans
- · American Indians
- People with a family history of diabetes

Obesity is associated with higher risk. Women who have had gestational diabetes are at increased risk for later developing Type 2 diabetes. In some studies, nearly 40% of women with a history of gestational diabetes developed diabetes in the future.

## Other types of diabetes

Other specific types of diabetes may result from

- Specific genetic syndromes
- Surgery
- Drugs
- Malnutrition
- Infections
- · Other illnesses

These other types of diabetes may account for 1 to 2% of all diagnosed cases of diabetes.

## **Hyperglycemia**

Hyperglycemia is the technical term for high blood glucose (blood sugar). High blood sugar happens when the body has too little insulin or when the body cannot use insulin properly.

Hyperglycemia is defined as blood suger above the normal range of 70/130 mg/dL before a meal or 180 mg/dL within one or two hours after a meal.

Factors that can contribute to hyperglycemia in people with diabetes include:

- Food
- · Sedentary lifestyle
- Illness
- · Non-diabetes medications
- Skipping or not taking enough glucose-lowering medication

It is important to treat hyperglycemia. Untreated hyperglycemia can become severe and lead to serious complications.

Complications may include diabetic coma requiring emergency care.

Hyperglycemia over a long period, even if not severe, can lead to complications affecting eyes, kidneys, nerves and heart.

Symptoms develop slowly over several days or weeks. The longer the blood sugar levels stay high, the more serious the symptoms become.

### **Early signs and symptoms**

- Frequent urination
- · Increased thirst
- Increased hunger
- Blurred vision
- Fatigue
- Headache

## Later signs and symptoms

- Fruity-smelling breath
- · Nausea and vomiting
- · Shortness of breath
- · Dry mouth
- Weakness
- Confusion
- Abdominal pain
- Coma

# To help keep blood sugar within the target range

- Support following a diabetes meal plan
- Support monitoring of blood sugar
- · Support taking medication as prescribed
- Note that medication may need to be adjusted if physical activity changes

George is a 63-year-old man with Type 2 diabetes. He is experiencing increased thirst and urinating more frequently. His blood sugar is above 180 mg/dL. How might you support George?



## **Hypoglycemia**

Hypoglycemia is the term for blood sugar that is lower than normal. Low blood sugar occurs when someone with diabetes does not have enough sugar (glucose) in the blood. Glucose is the main source of fuel for the body and brain. If the body does not get enough, it does not function well. Blood sugar amounts below 70 milligrams per deciliter (mg/dL) are considered low.

Treat low blood sugar promptly.

## Early warning signs include:

- Shakiness
- Dizziness
- Sweating
- Hunger
- · Fast heartbeat
- · Inability to concentrate
- Confusion
- · Irritability or moodiness
- · Anxiety or nervousness
- Headache

## Nighttime signs and symptoms

- Damp sheets or nightclothes due to perspiration
- Nightmares
- Tiredness, irritability or confusion upon waking

## **Severe signs and symptoms**

- · Clumsiness or jerky movements
- · Inability to eat or drink
- Muscle weakness
- · Difficulty speaking or slurred speech
- Blurry or double vision
- Drowsiness
- Confusion
- · Convulsions or seizures
- Unconsciousness
- Death (rare)

## To prevent diabetic hypoglycemia

- · Support monitoring blood sugar
- Support consistent meals and snacks
- · Support taking medication as recommended by doctor
- Note that medications may need changed or may need additional snacks if physical activity increases
- If choosing to drink alcohol, encourage eating a meal or snack at the same time.
- · Record any low blood glucose reactions.

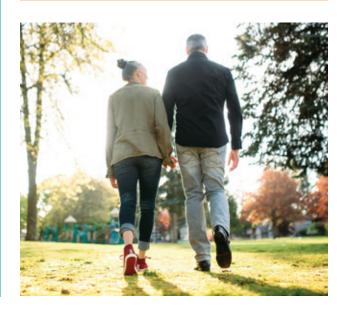
# What causes the blood sugar to go up and down

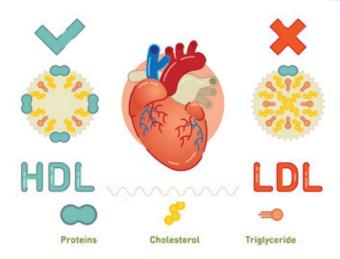
- Exercise
- Infection
- Eating
- · Too much insulin
- · Certain medications

## **Treatment of Hypoglycemia**

To treat hypoglycemia, individuals should eat or drink 15-20 g or glucose in any form of carbohydrate that contains glucose and recheck glucose levels after 15 minutes.

Madelyn is a 77-year-old female with Type 2 diabetes. She suddenly feels hungry and becomes dizzy. She starts sweating as she sits down. Her blood sugar amounts are below 70 mg/dL. How can you support Madelyn?





### **Cholesterol**

Cholesterol is a fatty like substance found in the blood. Some cholesterol is important for overall health. Too much cholesterol can be harmful.

The liver naturally makes cholesterol for the body, and some comes from food. Meat, fish, eggs, butter, cheese and milk give the body extra cholesterol. Fruits, vegetables, and whole grains do not have cholesterol. However, eating too much unhealthy fats and cholesterol can have a negative impact on the body.

When cholesterol levels are too high, arteries can narrow or block. This contributes to cardiovascular disease (CVD) and premature death.

People with diabetes are more prone to having unhealthy high cholesterol levels.

Diabetes tends to lower "good" cholesterol levels and raise triglyceride (a type of fat in the blood) and "bad" cholesterol levels. This increases the risk for heart disease and stroke. This common condition is diabetic dyslipidemia.

Cholesterol in the blood combines with proteins to help it move through the body. Cholesterol and protein together are lipoproteins.

# Low-density lipoprotein (LDL) cholesterol

Low-density lipoprotein (LDL) is considered "bad" cholesterol. LDL carries cholesterol from the liver into the bloodstream. LDL can stick to the blood vessels. This may lead to blood vessels getting narrower, stiffer or clogged. Over time, this can cause a heart attack or stroke.

## High-density lipoprotein (HDL) cholesterol

**High-density lipoprotein (HDL)** is considered "good" cholesterol. HDL carries cholesterol in the blood back to the liver where it is broken down.

Preventing high cholesterol may include eating a healthy diet that includes fruit, vegetables and whole grains. It also may include limiting or eliminating drinks and foods that contain sugar (such as soda, desserts and fried food) and getting plenty of exercise.

Read the list below. Circle if consuming the item is good or bad for cholesterol.

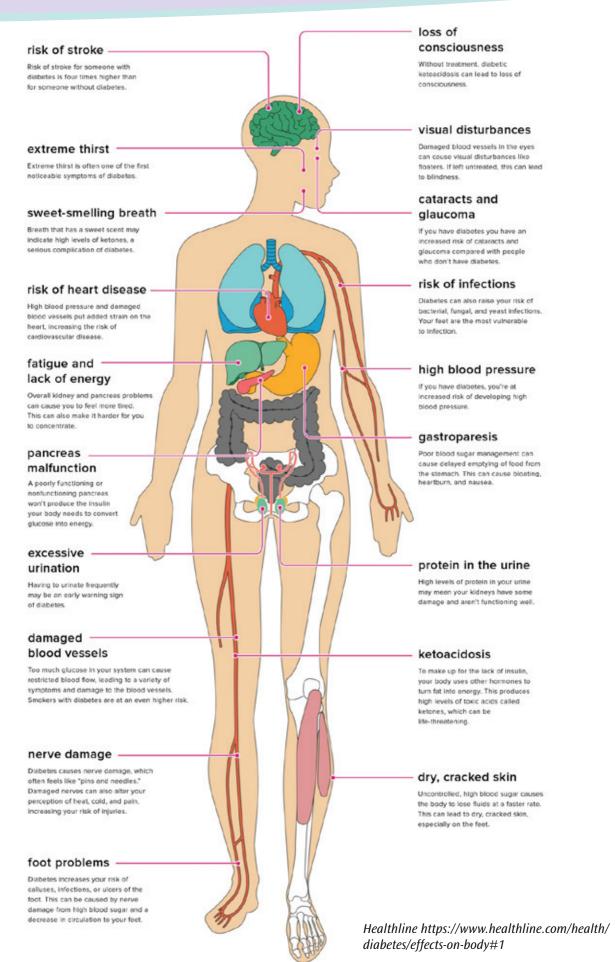
1.	Fruit	Good	Bad
2.	Soda	Good	Bad
3.	Donuts	Good	Bad
4.	Vegetables	Good	Bad
5.	Fried Food	Good	Bad
6.	Whole Grains	Good	Bad

# **Effects of Diabetes on the Body**

Blood sugar that is too high or too low for a long period affects the body's ability to turn sugar into energy. This can have a number of serious effects on the body from head to toe.

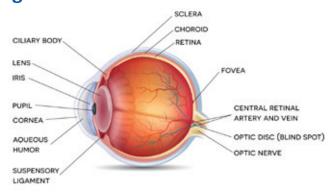
Learn the list of the many effects of diabetes on pages 15 through 22.

- Be aware of the effects.
- Consider ways that you might support the person experiencing these effects.



Ш	Cataracts, retinopathy and glaucoma
	Damaged blood vessels
	Dry mouth
	Dry, cracked skin
	Excess hunger
	Fatigue, tiredness, lack of energy, lethargic
	Foot problems
	Gastroparesis
	Heart disease
	High blood pressure
	Ketoacidosis
	Kidney disease (nephropathy)
	Loss of consciousness
	Mood changes
	Nerve damage
	Numbness or tingling in hands or feet
	Protein in the urine
	Red, swollen, or tender gums
	Slow wound healing or frequent infections
	Stroke
	Sweet-smelling breath
	Thirst
	Urination
	Visual disturbances / blurred vision
	Weight loss / weight gain

# Cataracts, retinopathy and glaucoma



#### NORMAL EYE

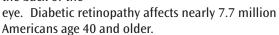
Diabetic eye disease includes glaucoma, diabetic macular edema, diabetic retinopathy and cataracts.

Individuals with diabetes have an increased risk of these diseases compared to people who do not have diabetes. The buildup of pressure in the eye can affect the main nerve going from the eye to the brain.

#### **Diabetic retinopathy**

Diabetic retinopathy is the most common diabetic eye disease experienced

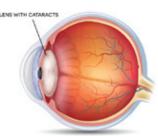
by people with diabetes. It damages the tiny blood vessels in the retina. The retina is the light-sensitive tissue that lines the back of the



#### **Cataracts**

Cataract is a clouding of the eye's lens resulting in blurring of normal vision. People with diabetes are

nearly twice as likely to develop cataracts when older. Cataracts tend to develop at an earlier age for people with diabetes.



"COTTON WOOL" SPOTS

ANEURYSM

HEMORRHAGES

HARD EXUDATES

ABNORMAL GROWTH OF BLOOD VESSELS

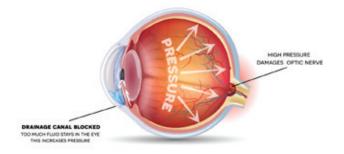
#### Glaucoma

A person with diabetes is twice as likely to develop glaucoma in comparison to people without diabetes. A person with glaucoma has a higher chance of developing diabetes than a person without the eye disease.

**Open-angle glaucoma:** The angle in the eye where the iris meets the cornea is as wide and open as it should be. The eye's drainage canals clog over time, causing an increase in internal eye pressure and damage to the optic nerve.

**Neovascular glaucoma:** a rare type of glaucoma that is always associated with other abnormalities such as diabetes. In some cases, the retina may grow new blood vessels.

Neovascular glaucoma can occur if the new blood vessels grow in the iris. This may close off the fluid flow in the eye and raise the eye pressure.



## **Damaged blood vessels**

Excessive glucose in the system can cause restricted blood flow. It can lead to a variety of symptoms and damage to the blood vessels.

A higher amount of glucose changes the behavior of the blood vessels, making them contract more than normal. This can result in higher blood pressure. It could also reduce the amount of blood that flows through vital organs.

Smokers with diabetes are at an even higher risk of damaged blood vessels. Damage to blood vessels or nerves may also cause foot problems.

### **Dry mouth**

Dry mouth is a common symptom of diabetes. High blood sugar levels could cause dry mouth in people with diabetes. Some medications may also cause dry mouth.

Dry mouth occurs due to a reduced amount of saliva in the mouth.

Symptoms may include

- · Rough dry tongue
- · Lack of moisture in the mouth
- · Frequent pain in the mouth
- · Cracked and chapped lips
- · Sores in the mouth
- · Infections in the mouth
- · Difficulty with swallowing, talking or chewing.

## Dry, cracked skin

Uncontrolled high blood sugar causes the body to lose fluids at a faster rate. This may lead to dry, cracked skin, especially on the feet.

## **Excess hunger**

Polyphagia is the medical term to describe excessive hunger or increased appetite. It is one of the three main signs of diabetes. When blood glucose levels remain abnormally high (hyperglycemia), glucose from the blood cannot enter the cells because either lack of insulin or insulin resistance.

The result is that the body cannot convert the food eaten into energy. The lack of energy causes an increase in hunger.

Eating will not get rid of the hunger feeling when diabetes is uncontrolled. This will just add to the already high blood glucose levels.

Abnormally low blood glucose (hypoglycemia) can also cause excess hunger when the blood glucose falls.



## **Fatigue**

(Also: Tiredness, lack of energy, lethargic.)

Fatigue is one of the most common symptoms associated with poorly controlled blood sugar.

With Type 2 diabetes, poor blood sugar control typically results in high blood sugar (hyperglycemia), which can cause fatigue.

Fatigue is extreme tiredness. Sudden and extreme tiredness is one of the main symptoms of diabetes.

Factors that contribute to fatigue may include high blood sugar levels, dehydration, low blood sugar and medications.

Symptoms may include

- · Lack of energy
- Difficulty performing simple tasks
- · Feeling low in mood

### **Foot problems**

Diabetes increases risk of calluses, infections or ulcers of the foot. Nerve damage from high blood sugar and decreased circulation may cause foot problems.

In rare cases, foot problems can lead to amputations. People with diabetes are 10 times more likely to have their toes and feet surgically removed compared to people living without the disease.



## **Gastroparesis**

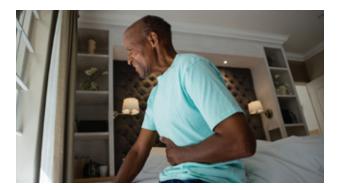
Gastroparesis is a condition when food stays in the stomach for longer than it should.

Poor blood sugar management can cause delayed emptying of food from the stomach. This can cause bloating, heartburn and nausea.

Symptoms of Gastroparesis may include:

- · Heartburn or gastroesophageal reflux disease (GERD)
- · Upset stomach
- · Throwing up undigested food
- · A feeling of fullness quickly when eating
- Bloating
- · Lack of appetite and weight loss
- · Trouble controlling blood sugar
- Belly pain

Diabetes is the most common known cause of gastroparesis. It can cause damage to the nerves including vagus nerve. The vagus nerve regulates the digestive system and certain cells in the stomach.



### **Heart disease**

Having diabetes increases the risk to develop heart disease and have a greater chance of heart attack or stroke.

High blood pressure and damaged blood vessels put added strain on the heart. This added strain increases risk for cardiovascular disease.

The heart has to work harder to pump blood when blood pressure is high. This can strain the heart and damage blood vessels and increase risks.

Smoking also raises the risk of developing heart disease. The combination of diabetes and smoking narrows blood vessels and can do other damage. (See smoking on page 26)

Abnormal cholesterol levels increase the risk of clogged blood vessels

Being overweight or obese can affect the ability to manage diabetes. It can increase risk for many health problems, including heart disease and blood pressure. Excess belly fat around the waist, even if not overweight can raise the chances of developing heart disease.

## **High blood pressure**

Blood pressure is the force of blood pushing against blood vessel walls. High blood pressure (HBP) means pressure in the arteries is higher than it should be. Another name for high blood pressure is hypertension.

High blood pressure is an increased risk for individuals who have diabetes.

Blood pressure is written as two numbers. For example, numbers may be "120 over 80" or written as 120/80.

The top (systolic) number is the pressure when the heart beats. The bottom (diastolic) number is the pressure when the heart rests between beats.

High blood pressure (HBP) usually has no signs or symptoms. That is why it is so dangerous. HBP can be managed.

When blood pressure is high, the heart is working harder and the risk for heart disease, stroke and other problems increases.

#### **Ketoacidosis**

Diabetic ketoacidosis (DKA) happens when blood sugar is very high and ketones build up to dangerous levels in the body.

Ketones are chemicals that the body creates when it breaks down fat to use for energy.

Ketones may increase to moderate or large amounts from:

- · Not enough insulin
- · Not enough food
- · Insulin reaction (low blood glucose)

When ketones build up in the blood, they make it more acidic. It is a warning sign of sickness. High levels of ketones can poison the body and can develop into DKA. DKA is a serious condition that can lead to diabetic coma (passing out for a long time) or even death.

#### Early symptoms of DKA:

- · Thirst or very dry mouth
- · Frequent urination
- · High blood glucose levels
- · High levels of ketones in urine

#### Other symptoms may include:

- · Constantly feeling tired
- · Dry or flushed skin
- · Nausea, vomiting, or abdominal pain
- · Difficulty breathing
- · Fruity odor on breath
- Difficulty paying attention
- Confusion

If vomiting continues for more than two hours, contact the health care provider.

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

American Heart Association

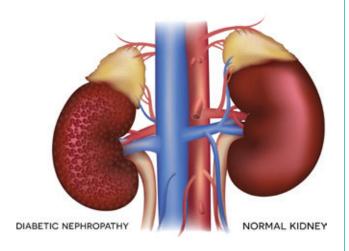
## **Kidney disease (nephropathy)**

Diabetes may damage the kidneys and cause them to fail. The job of the kidneys is to remove waste products from the blood.

When the kidneys fail, they lose their ability to filter out waste products. The result is kidney disease. When the body digests the protein from food, the process creates waste products.

Waste product is the byproduct of metabolism. The kidneys have millions of tiny blood vessels called capillaries. These capillaries have even tinier holes in them that act as filters.

Small waste products pass through these tiny filters and become part of the urine. Useful substances, such as protein and red blood cells are too big to pass through the filters and stay in the blood.



Diabetes can damage this system. High levels of blood sugar damage the blood vessels in the kidneys. This damage results in the kidney filters not filtering waste properly.

After many years, the filters start to leak and useful protein is lost in the urine and over time. The added stress of overwork causes the kidneys to lose their filtering ability and waste products start to build up in the blood and eventually causes the kidneys to fail completely.

This failure is End-Stage Renal Disease (ESRD). ESRD is very serious and can be fatal. A person with ESRD needs to have a kidney transplant or have the blood filtered by machine (dialysis).

Diabetic kidney disease can be prevented by keeping blood glucose in the target range. Not everyone with diabetes develops kidney disease.

Factors that can influence kidney disease development include

- Genetics
- · Blood sugar control
- · Blood pressure

Kidney disease produces no symptoms until almost all function is gone. The first symptom of kidney disease is often fluid buildup. Other symptoms include loss of sleep, poor appetite, upset stomach, weakness and difficulty concentrating.

#### Loss of consciousness

Diabetic ketoacidosis can lead to loss of consciousness. A diabetic coma occurs when a person with diabetes loses consciousness.

It can occur with gestational, Type 1 or Type 2 diabetes. When the blood sugar levels become either too low or too high, a diabetic coma can occur.

High blood sugar (hyperglycemia) may cause lightheadedness and loss of consciousness. Low blood sugar (hypoglycemia) can cause dehydration and loss of consciousness.

Diabetic coma may also occur from ketoacidosis. (See diabetic ketoacidosis on page 18)

## **Mood changes**

Mood changes may occur from blood glucose fluctuation. Poor management of blood sugar can lead to negative moods and a lower quality of life.

Mood changes may include anxiety, depression and stress. Mood changes may occur when blood sugar is too high or too low. Another cause of mood changes may come from worry or stress of managing the diabetes over time. It can lead to feelings of being overwhelmed and burned out.

High blood sugar levels may make a person feel tense, angry, irritable, sad, foggy, faint, thirsty, tired, nervous and lethargic.

Diabetes distress may occur and shares some symptoms of depression, anxiety and stress. This distress can affect a person's quality of life.

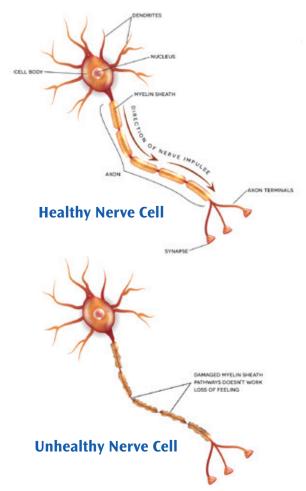
## **Nerve damage**

Diabetic neuropathy is a type of nerve damage that can occur with diabetes.

Diabetes causes nerve damage, which often feels like pins and needles. The neuropathy most often damages the nerves in the legs and feet.

Depending on the nerves damaged, symptoms can range from pain and numbness in the legs and feet to digestive problems, urinary tract problems and problems with blood vessels and the heart. Severity levels of the symptoms range from mild to disabling.

Damaged nerves can alter perception of heat, cold and pain, which may increase risk of injury.



## **Numbness**

(Also: Tingling in hands or feet)

Tingling and loss of sensation (numbness) may occur in the hands and feet. It may also cause burning pain in the arms, hands, legs and feet. This is from too much glucose in the blood affecting the function of the nerves (See nerve damage page 20).

#### Protein in the urine

High levels of protein in the urine (proteinuria) may mean kidneys have some damage and are not functioning well. This condition is often a sign of kidney disease.

The kidneys are filters. When kidney disease damages the kidneys, proteins may leak from the blood into the urine.

Most people will not notice any signs in early or mild cases. Over time, as the condition worsens, symptoms may include:

- · Foamy or bubbly urine
- Swelling (edema) in hands, feet, belly and face
- · Urinating more often
- · Shortness of breath
- Fatigue
- · Loss of appetite
- · Upset stomach and vomiting
- · Muscle cramps at night

## Red, swollen, or tender gums

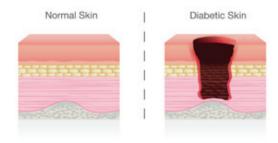
Diabetes may weaken the ability to fight germs. This increases the risk of infection in the gums and bones that hold the teeth in place. Gums may pull away from the teeth. The teeth may become loose, or sores or pockets of puss may develop in the gums. This is more frequent if there is already a gum infection before the diabetes develops.

# Slow wound healing or frequent infections

Diabetes can also raise the risk of bacterial, fungal and yeast infections. High blood sugar levels can weaken the immune system defenses. Plaque builds up in the blood vessels. The feet are the most vulnerable to infection.

High levels of blood glucose can lead to poor blood flow and impair the body's natural healing process.

People with diabetes may notice slow-healing sores, especially on the feet. In women with diabetes, bladder and vaginal yeast-infections may occur more often.



#### **Stroke**

A stroke happens when the blood supply to part of the brain is interrupted suddenly. Most strokes occur from a blood clot that blocks a blood vessel in the brain or neck. Risk of stroke is 1.5 times higher for someone with diabetes than for someone without diabetes.

A stroke can cause difficulty with movement, pain, numbness and problems thinking, remembering or speaking. It is important to recognize the signs of stroke and call 911 right away.

There may be ways to reduce the risk of stroke. This includes:

- Keep blood glucose (blood sugar), blood pressure and cholesterol on target.
- · Eat healthy.
- · Maintain physical activity.
- Take medicine as needed.

Smoking may contribute to risk of stroke and quitting may reduce risks.

### LEARN HOW TO RECOGNIZE **STROKE** BALANCE EYES ARMS SPEECH FACE LOSS OF BALANCE. BLURRED VISION ARM OR LEG SPEECH DIFFICULTY TIME TO CALL ONE SIDE OF THE HEADACHE FOR AMBULANCE FACE IS DROOPING WEAKNESS IMMEDIATELY





A stroke is a sudden interruption in the blood supply of the brain.



1 in 6 people will have a stroke in their lifetime.



Stroke can happen at any age, three-quarters of all strokes occur in people over the age of 65.

## **Sweet-smelling breath**

Breath that has a sweet scent may indicate high levels of ketones. This is a serious complication of diabetes. (See ketoacidosis page 18).

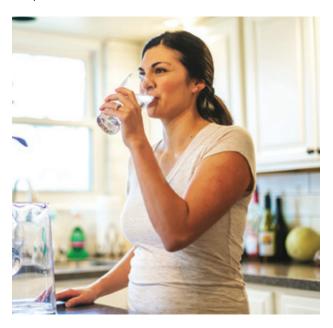
#### **Thirst**

Extreme or excessive thirst (polydipsia) is often one of the first noticeable symptoms of diabetes. This can be a sign of hyperglycemia or high blood sugar.

It is normal to feel thirsty when dehydrated from not drinking enough water, sweating too much or eating salty or spicy foods. Uncontrolled diabetes can make an individual feel thirsty all the time without any reason.

The kidneys regulate levels of blood sugar by filtering the blood and absorbing excess glucose.

When high levels of sugar build up in the blood, the kidneys cannot keep up. The kidneys produce more urine than normal. As a result, an individual can become dehydrated.



### **Urination**

Excessive urination may be an early warning sign of diabetes. When an individual has diabetes, excess glucose builds up in the blood.

The kidneys work overtime to filter and absorb the excess glucose. When the kidneys cannot keep up with the task, the excess glucose empties into the urine. This drags along fluids from the tissues and creates dehydration.

Dehydration creates a feeling of thirst and as a person drinks more fluids, they will urinate even more.

# Visual disturbances and blurred vision

Diabetes symptoms sometimes involve vision. High levels of blood glucose pull fluid from the tissues, including the lenses of the eyes.

This affects the ability to focus. A person may have blurry vision and is unable to see fine details. Objects lack sharpness or may be out of focus.

Damaged blood vessels in the eyes can cause visual disturbances like floaters. If left untreated, this can lead to blindness.

Left untreated, diabetes can cause new blood vessels to form in the retina (the back part of the eye) and damage established vessels.

For most people, these early changes do not cause vision problems. If these changes progress undetected, they can lead to vision loss and blindness.

## Weight gain and weight loss

Weight gain is a common symptom of diabetes and other insulin-related medical conditions.

If consuming more calories than needed to maintain a healthy weight, the cells get more glucose than they need. Glucose accumulates as fat when the cells do not use it.

On the other hand, loss of glucose through frequent urination causes loss of calories. Diabetes may keep glucose from the food from reaching the cells, leading to constant hunger. The combined effect can potentially cause rapid weight loss, especially with Type 1 diabetes.

## **Lesson Summary**

- Diabetes Mellitus or Diabetes refers to a complex group of diseases. This group of diseases relate to harmfully high blood glucose (also known as glucose, blood sugar or sugar). Diabetes is a chronic condition; there is no cure currently. Diabetes is manageable.
- When a person has diabetes, too much of the body's glucose stays in the blood.
- People with prediabetes have an increased risk of developing Type 2 diabetes, heart disease, and stroke.
- Type 1 diabetes (previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes) may account for 5 to 10% of all diagnosed cases of diabetes.
   In Type 1 diabetes the body produces very little to no insulin

- In Type 2 diabetes, the body does not make enough insulin or does not use insulin well, people with Type 2 often need to take oral medications or insulin and Type 2 is the most common form of diabetes.
- Gestational diabetes may occur when a woman is pregnant.
- Hyperglycemia is the technical term for high blood glucose (blood sugar).
- Hypoglycemia is the term for blood sugar that is lower than normal.
- Cholesterol is a type of fat in the blood. People with diabetes are more prone to having unhealthy high cholesterol levels.
- Diabetes can have many negative effects on the body including damage to eyes, mouth, blood vessels, nervous system, feet, organs and other conditions.

## **Checkpoint**

A. Type 1

Read the diabetes type options listed. Place the letter that corresponds with the type on the line that best matches the characteristic. Use each letter once.

<b>B.</b> Ty	ype 2
<b>C.</b> G	estational
	1. This type of diabetes was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. This type of diabetes may account for 90 to 95% of all diagnosed cases of diabetes.
	2. This type of diabetes develops in 2 to 5% of all pregnancies but usually disappears when pregnancy is over.
	3. This type of diabetes was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes, may account for 5 to 10% of all diagnosed cases of diabetes.

Rea	nd the statements below and indicate if they are true or false	True	False
4.	Diabetic eye disease includes glaucoma, diabetic retinopathy and cataracts.		
5.	Diabetes increases risk of calluses, infections or ulcers of the foot.		
6.	Diabetic ketoacidosis happens when blood sugar is very high and ketones build up to dangerous levels in the body.		
7.	Kidney disease always follows a diagnosis of diabetes from high levels of blood sugar forcing the kidneys to filter too much blood.		
8.	Diabetes most often damages the nerves in the arms and hands.		
9.	Diabetes can raise the risk of bacterial, fungal and yeast infections.		
10.	Extreme thirst only occurs when dehydrated from not drinking enough water.		

# Lesson 2 Prevention

## **Objective:**

The caregiver will recognize methods to prevent or delay diabetes.

### **Overview**

Currently, no one knows how to prevent Type 1 diabetes. It is possible to manage Type 1 diabetes.

Before developing Type 2 diabetes, most people have prediabetes. Blood sugar is higher than normal and not high enough yet for a diabetes diagnosis. It is possible to reverse prediabetes.

Prevention or delay of Type 2 diabetes is possible with the help of lifestyle changes. Lifestyle changes include losing weight if needed, eating healthy and being more active.

### **Prevention**

Individuals who are at risk for diabetes may prevent or delay getting diabetes by adopting a healthier lifestyle. Healthier lifestyle habits that support prevention or delaying diabetes might include:

- · Lose weight and keep it off
- Follow a healthy eating plan
- Exercise regularly
- · Do not smoke

## Weight loss and keep it off

Losing 5 to 10% of current body weight may prevent or delay diabetes. Once the weight is lost, it is important to keep the weight off.

Body mass index (BMI) is a useful measure of being overweight and obesity. Calculations of BMI come from height and weight. BMI is an estimate of body fat and a good gauge of disease risk that can occur with more body fat.

BMI calculators and tables can be found online and can indicate if an individual is underweight, normal, overweight or obese.



Set a goal weight by talking with a healthcare provider.

Habits of successful weight loss:

- Track eating and activity
- · Adopt healthy and realistic eating habits
- · Track weight
- Stay active daily
- Get/offer support

Think about ways to reach and stay at a healthy weight. Share your ideas with the class.

## Follow a healthy eating plan

Eat fewer calories and follow a healthy eating plan. Some people may give up sugary desserts to help lower calories. Others find measuring food and watching portions is the key. Some people use the plate method to eat a variety of nutrients within their meals. Making just a few changes can help with weight loss.



- Limit high-calorie snacks. Instead, choose lower calorie, healthy snacks. For instance, try a carrot with a low calorie dip or a few whole-grain crackers with a slice of cheese.
- Skip sweet and fatty desserts. Try some plain yogurt with fruit instead.
- Cut back on high-calorie drinks. Limit the amount of alcohol consumed. Drink water instead of soft drinks. Limit consumption of 100% juice and add water if desiring a larger portion.
- Eat smaller portions. Use a measuring cup and a kitchen food scale to get a true view of consumed food. When measuring food, the amount might be surprising.

List other ways to make changes in a healthy eating plan:

Tracking meals, snacks and drinks can help weight loss. Keeping track gives the individual an idea of eating patterns and how much food they eat in each meal or in a day.

Try to track when, what and how much food and drink are consumed. Also, track calories.

Track by:

- Voice recording with a smart phone or other device.
- Take a photo of the food and write it down later.
- Use a notebook, spreadsheet, or smart phone or computer app.
- · Write details in the food log.

Other ways to track meals, snacks and drinks:

## **Get regular exercise**

Staying physically active can help you reach and stay at a healthy weight. Staying active helps burn calories.

There are many benefits to regular physical activity. Exercise may help:

- · Weight loss
- Lower blood sugar
- Boost sensitivity to insulin- which helps keep blood sugar within a normal range



The greatest benefit comes from a fitness program that includes both aerobic exercise and resistance training. Ways to add activity to the day:

- · Hike with kids or grandkids
- · March in place while watching TV or videos
- · Ride a bike
- Take the stairs
- · Try a new sport
- Walk during your lunch break
- Stand up and move after reading a chapter in a book
- Dance to favorite music
- Replace Sunday drives with Sunday walks
- Start a new active hobby, such as biking or hiking
- · Take a walk after dinner
- · Track steps with a pedometer
- · Walk the dog

How might you support a person to increase physical activity if they tell you:
☐ It is too hot, cold or wet outside.
☐ I do not have time.
☐ I do not have a car.
☐ I feel embarrassed.
☐ It costs too much.
☐ It is boring.
☐ It is painful or tiring.

## **Stop smoking**

Smoking can contribute to insulin resistance, which can lead to Type 2 diabetes.

Quitting is not easy. Short-term effects of quitting may include weight gain, irritability and anxiety. Some people may try several times before they succeed. There are many ways to quit smoking. Some people stop "cold turkey." Others benefit from step-by-step manuals, counseling or medications or products that help reduce nicotine addiction.



#### When the person is ready to quit smoking

Be familiar with any policy or procedure in your setting on resident/client rights and smoking. See tips below that are adapted from the CDC.

- **1.** Support the person to pick a date within the next two weeks that gives the best chance of success. Avoid choosing a stressful time.
- **2.** Is support available from friends and family members? It is easier to quit when there is support.
  - Check in with the person to see how things are going.
  - Offer support when dealing with smoking triggers.
  - Offer support planning healthy activities.
  - Do not smoke around the individual or quit together.
  - Be patient with the person.
- **3.** Talk with healthcare provider for support. Do medications need to be adjusted?

- **4.** Offer support to help the individual cope with feelings that may occur in the first few weeks such as anxiety, sadness, and irritability. Know that the individual may crave cigarettes, get hungry more often and have trouble thinking clearly and sleeping.
- **5.** Offer support around avoiding triggers (people, places or activities that make the individual feel like smoking).
- **6.** Offer support when the individual wants to get rid of all smoking-related items including ashtrays, cigarettes, lighters, matches. Offer support washing clothes and other fabrics such as curtains.
- 7. Offer resources when appropriate.

What are ways that you might offer support for an individual who is experiencing feelings related to quitting smoking?

#### Resources

**BeTobaccoFree.gov** (Department of Health and Human Services)

Call **1-800-QUIT-NOW** (1-800-784-8669)

**Cigarette Smoking: Health Risks and How to Quit** (PDQ) From the National Institutes of Health (National Cancer Institute) (Also in Spanish)

**Create My Quit Plan from the National Institutes of Health** (National Cancer Institute, Tobacco Control Research Branch) (Also in Spanish)

Harms of Smoking and Health Benefits of Quitting From the National Institutes of Health (National Cancer Institute) (Also in Spanish)

**How to Quit Smoking or Smokeless Tobacco** (American Cancer Society) (Also in Spanish)

**Quit Smoking Easy-to-Read** (Office of Disease Prevention and Health Promotion)

**Smokefree.gov from the National Institutes of Health** (National Cancer Institute, Tobacco Control Research Branch)

**Smoking and Tobacco Use: How to Quit** (Centers for Disease Control and Prevention)

# **National Diabetes Prevention Program**

The National Diabetes Prevention Program (National DPP) is a partnership of public and private organizations working to prevent or delay Type 2 diabetes. Partners make it easier for people at risk for Type 2 diabetes to participate in evidence-based lifestyle change programs to reduce their risk of Type 2 diabetes.

The program created in 2010 addresses the increasing concern of prediabetes and Type 2 diabetes in the United States.

One key feature of the DPP is the CDC-recognized lifestyle change program. A research based program focusing on healthy eating and physical activity. It showed that people with prediabetes who take part in a structured lifestyle change program can cut their risk of developing Type 2 diabetes by 58%, and 71% for people over 60 years old.

The Prevent T2 is a program for people with prediabetes and for those who are at high risk for Type 2 diabetes and want to lower their risk.

The program takes 12 months to complete. Topics from this prevention program include:

- Get active
- Track activity
- Fat well
- Track food
- · Get more active
- · Burn more calories
- Shop and cook

- Manage stress
- · Find time for fitness
- · Cope with triggers
- · Keep heart healthy
- · Get support
- · Eat well away from home
- When weight loss stalls
- · Take a fitness break
- Stay active
- Stay active away from home
- More about T2
- More about carbs
- · Have healthy food and enjoy
- · Get enough sleep
- Get back on track
- Prevent Type 2 diabetes for life

Learn more about physical activity and nutrition in lesson 6 and 11.

## **Lesson Summary**

- Individuals who are at risk for diabetes may prevent or delay getting diabetes by adopting a healthier lifestyle. Healthier lifestyle habits that support prevention or delaying diabetes might include lose weight and keep it off, follow a healthy eating plan, exercise regularly and do not smoke.
- Losing 5 to 10% of current body weight may prevent or delay diabetes.

## **Checkpoint**

Read the scenarios below and select the best answer from the choices listed.

Lindsay is 5'3". She weighs 192 pounds. She has improved her eating and has been following a healthy eating plan and following the plan closely. She started walking daily, increasing her time and distance. She smokes regularly. She is at risk of developing diabetes. How can Lindsay further prevent or delay diabetes?

- A. Lose weight and stop smoking
- **B.** Stop smoking and follow a healthy eating plan
- **C.** Follow a healthy eating plan and lose weight
- **D.** All of the above

# **Lesson 3 Living with Diabetes**

## **Objective:**

The caregiver will identify various challenges of living with diabetes.

### **Overview**

Living with diabetes is challenging and complicated. Living with diabetes includes challenges with sexuality and intimacy. Challenges include the financial impact of living with diabetes. These challenges can be devastating.

Smoking may increase the risk of getting diabetes and can worsen the complications and controlling the disease.

Older adults with diabetes may experience extra complications, take multiple medications and the need for routine eye exams.

## **Sexuality and Intimacy**

Sexuality is a basic human need that starts at birth. This need continues throughout our lives. Every individual has a need for love, touch, intimacy and companionship.

The sexual needs of older adults are like those of younger adults. The needs may vary in frequency, intensity and mode of expression.

Relationships enhance the quality of life and contribute to longevity.



Sexuality is the feeling of sexual desire and expressions through sexual activity. It is a central and natural part of who we are throughout our lifetime..

#### Sexuality includes:

- Sex drive
- Sexual acts
- · Gender identities
- Roles
- Sexual orientation
- Eroticism
- Pleasure
- Intimacy
- Reproduction



Expressions of sexuality in long-term care have included a range of actions. Expressions of sexuality might include sexual intercourse, affection, flirtation, compliments, closeness, physical contact and physical appearance.

Intimacy is the giving and receiving of love and affection. Intimacy is a close, familiar and usually affectionate or loving personal relationship.

Intimacy may include:

- Caring touch
- Empathetic understanding
- Comfort
- Feelings of safety in the relationship

The desire for intimacy does not decrease with age.

A person with diabetes does not lose his or her sexual identity or the need for intimacy. The person you care for may experience sexual issues as an effect of long-term diabetes.

The effects of long-term diabetes are dependent on two things.

- 1. Length of time having the disease
- 2. Disease management over time

## Sexual issues for men with diabetes

#### **Erectile dysfunction**

Erectile dysfunction is complications of reduced blood flow and poor nerve conduction (neuropathy). It may be a side effect of medications for high blood pressure.

#### Low testosterone

Low testosterone is a hormone associated with sexual arousal and sexual energy (Libido). When it is low, it usually means interest in sex is lower.

#### **Delayed ejaculation or orgasm**

Delayed ejaculation or orgasm is associated with neuropathy. It is sometimes associated with antidepressants.

#### **Retrograde ejaculation**

Retrograde ejaculation is a condition linked to neuropathy. It occurs when the ejaculate backs up into the bladder rather than ejected out the penis.

#### **Peronies disease**

Peronies disease causes a painful curvature of the penis. The cause is plaque buildup in an artery of the penis.

# Sexual issues for women with diabetes

#### **Lack of Iubrication**

Similar to men this is associated with neuropathy or reduced blood flow.

#### Increased difficulty achieving orgasm

This is associated with neuropathy.

#### **Increased risk for yeast infections**

Increased risk for yeast infection is due to elevated glucose levels.

#### Other factors

Men and women with diabetes have other factors that can have an effect on sexuality.

People who have diabetes have increased risks for developing depression and anxiety. These two conditions affect sexual interest and performance.

#### Do no harm

Your guiding principle is "do no harm." The person's well-being is your primary goal. A couple has the right to engage in sexual activity if there is no harm and it enhances quality of life.

Often, caregivers, family and relatives of the couple are uncomfortable with sexual activity. They may view sexual activity as a problem.

The key to approach sexual behaviors is the same as the approach to all other care. Consider the person and his or her feelings and needs first. A person with diabetes has the same rights as other people.

The people you care for have the right to be sexually active. Sexual activity may occur as long as it is not harming others, regardless of age, ability or sexual preference.

Sexuality is a basic need that people should be free to express without fear or disapproval. All adults have the right to make choices about their relationships and private life. Even if those choices are not the same as what you would make.

### **Caregiver responsibility**

Become familiar with company policies around sexual behaviors. Talk with your supervisor, even if it is not a current concern. You need to be prepared and know the expectations in these situations before it happens.

## Reporting non-consensual sexual conduct

It is Washington state law and your obligation to report all concerns of suspected non-consensual sexual conduct and/or relationships. This protects the health and safety of the individuals you care for.

Make a report when there is reason to suspect sexual contact and/or relationships between residents, which are non-consensual. (Chapter 74.34 RCW)

Facilities that fail to report are subject to civil penalties. Talk with your supervisor and become familiar with policies.

If non-consensual sexual contact and/or relationships have occurred and the report is not made, the facility may face significant fines and other enforcement actions, including, but not limited to, stop placement.

When there is reason to suspect that sexual assault has occurred mandated reporters shall immediately report the appropriate law enforcement agency and to the department. (Chapter 74.34.035 RCW)

How might you support an individual experiencing sexuality and intimacy concerns?

## **Smoking**

Cigarette smoking is a cause of Type 2 diabetes. Smokers have a 30 to 40% greater risk of developing diabetes than nonsmokers. The risk increases with the number of cigarettes smoked per day.

Smoking can worsen the complications of existing diabetes and makes the diabetes harder to control.

- Insulin helps blood sugar enter cells. Nicotine changes cells so that they do not respond to insulin. This increases blood sugar levels.
- Chemicals in cigarettes harm cells in the body and cause inflammation. This also makes cells stop responding to insulin.
- People who smoke have a higher risk of belly fat. This increases the risk for Type 2 diabetes even if they are not overweight.

Smoking with diabetes have higher risks for serious complications, including:

- · Heart and kidney disease
- Poor blood flow in the legs and feet that can lead to complications. This includes infections, ulcers and possible amputation.
- Retinopathy (an eye disease that can cause blindness)
- Peripheral neuropathy (damaged nerves to the arms and legs that cause numbness, pain, weakness and poor coordination)
- · Lung disease

Quitting smoking helps the body use insulin better. It makes blood sugar levels easier to manage. People with diabetes who quit have better control of their blood sugar levels.



#### **Video/Scenario:**

Bill started smoking as a teenager. He ignored his doctor's warning that smoking could make his diabetes worse.

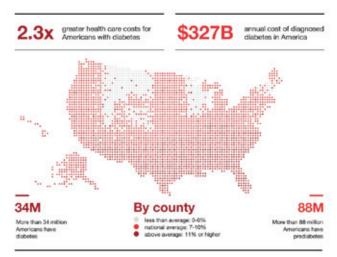
In this video, Bill explains how different his life is now. He quit smoking before he turned 40, but not before losing a leg, kidney function, and the sight in one eye.

Bill: Life is so different https://youtu.be/TqjxdhGxsvg

Discuss how smoking affected Bill's life. How might you support someone that you care for to stop smoking?

### Costs

The American Diabetes Association estimates that the cost of diabetes in America in 2017 was \$327 billion. This is a 26% increase over a five-year period.



https://www.diabetes.org/resources/statistics/cost-diabetes

In Washington state, the total estimated cost was \$6.7 billion in 2017.

The largest medical expenditures are:

- · Hospital inpatient care
- Prescription medications to treat complications of diabetes
- · Anti-diabetic agents and diabetes supplies
- Physician office visits

#### Costs include:

- · Work-related absences
- Reduced productivity at work and at home
- · Unemployment from chronic disability
- · Premature deaths

People with diagnosed diabetes experience average medical expenses of \$16,752 per year. \$9,601 related to diabetes.

On average, people with diagnosed diabetes have medical expenses about 2.3 times higher than what expenses would be in the absence of diabetes.

#### **Emotional effects**

The costs associated with diabetes can be devastating. Worrying about debt may trigger stress, fear, shame, panic, anger and depression.

The person you are providing care for may talk about these costs or concerns.

The person may have concerns about how they will support their family. They may also have concerns about how they will pay for managing the disease and the cost of medications.

You may notice the emotional effects of the financial burdens.

Think about how costs associated with diabetes might make you feel. Think about how it might affect your life. Recognize that the person you care for may feel these and other emotions.



## **Providing support**

Talking about money can be awkward and can be a very personal topic. We all have emotional triggers when we talk about money. It is important to be supportive and communicate respectfully when discussing financial concerns.

Sharing concerns may help lower stress for the individual.

- Focus on the person and conversation.
- Make sure the time and space honor the person's privacy.



- Avoid interrupting or trying to redirect the conversation to your concerns.
- Show interest in the conversation. Nod, smile and encourage the person to continue.
- Set aside judgment. You do not have to agree or like what they say. Do recognize that money and financial stress does not define who a person is. Refrain from criticizing.
- Provide feedback by paraphrasing or asking clarifying questions.
- Do not share your own financial concerns.

Be aware of any policies and resources that you might have in your setting. You may need to refer the person to talk to someone else.

There may be external resources available to support the individual in being able to afford medication or food. Learn more about communication and motivational interviewing in lesson 7 on page 77.

### **Diabetes in Older Adults**

The number of adults 65 years or older affected by diabetes is increasing. Older adults represent one of the fastest growing segment of the diabetes population.

An estimated 26.8% of adults aged 65 or older, or 14.3 million seniors have diagnosed and undiagnosed diabetes. (American Diabetes Association, 2018) There is an expectation that numbers will grow dramatically over the next few decades.

This population is more at risk of developing diabetesrelated complications like low blood sugar, kidney failure and heart disease than younger people living with diabetes.

Older adults with diabetes are at higher risk for depression and cognitive impairment compared with others their age who do not have diabetes. Having depression or cognitive impairment can make diabetes self-care challenging.

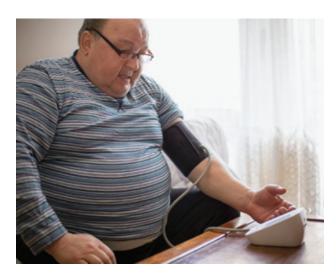
While there are steps that people can take to delay or prevent Type 2 diabetes, there are also steps that can help manage the condition and prevent diabetesrelated health problems.

## **Coexisting medical conditions**

Coexisting medical condition (also known as comorbidity) is the presence of two chronic diseases or conditions.

Many people with diabetes are managing additional coexisting chronic health conditions and complications.

Diabetes-related complications are more likely and severe in unmanaged diabetes or those who have had diabetes longer.



In 2017, Washington adults with diabetes were more likely to have several other chronic health conditions compared to adults without diabetes.

Condition	Times more likely
Kidney disease	4.6
Stroke	3.3
Heart disease	2.7
High blood pressure	2.3
High cholesterol	2.3
Lung disease	1.9
Asthma	1.6
Arthritis	1.5
Depressive disorder	1.5

WA DOH Diabetes Data Supplement 2019

Older adults with diabetes were more likely to have high blood pressure, high cholesterol, heart disease, stroke, arthritis and cancer compared to younger adults with diabetes. Younger adults with diabetes are more likely to have depressive disorder and asthma.

A recent study in Washington state found that complications directly attributed to having diabetes were substantial.

#### On average diabetes caused:

#### **Complications**

- · Mobility limitations
- · Limitations in activities of daily living
- Severe visual impairment or blindness among adults

#### **Diabetes-associated hospitalizations**

- · Congestive heart failure
- · Heart attack
- · Lower extremity amputation

#### **Complications among Medicare beneficiaries**

- · Coronary heart disease
- · Chronic kidney disease
- Peripheral vascular disease

Discuss ways that you might support someone who is experiencing coexisting medical conditions with diabetes.

## **Polypharmacy**

Polypharmacy is the use of multiple medications (5-10+ medications) by an individual for one or more conditions.

The medications may be prescribed and/or over-thecounter medications.

It may have adverse effects of between medications or medications with food.

Polypharmacy affects quality of life. Especially for those with Type 2 diabetes. People with Type 2 diabetes require treatment for both diabetes and related or unrelated conditions.

People with diabetes may have more coexisting conditions and may be twice as likely to take more drugs in comparison to people without diabetes.



Aging individuals with diabetes often require multiple medications to treat their diabetes and other conditions and complications.

Multiple medications add to the cost and complexity of the treatments. It also places individuals at greater risk for adverse drug reactions and drug-drug interactions. Aging populations are susceptible to geriatric syndromes (cognitive impairment, delirium, falls, reduced appetite, weight loss, urinary incontinence and depression) associated with inappropriate medications. Potential adverse drug reactions may include:

- Confusion
- · Cognitive impairment
- · Falls and fractures
- Urinary retention
- Hypotension
- Insomnia
- Constipation

Physicians should routinely monitor the individual for drug-drug, drug-food interactions, side effects and inappropriate medication.

Work with the appropriate healthcare professional to:

- · Avoid drug interactions
- · Limit or stop unnecessary medications
- Choose drugs most appropriate for the individual for best outcomes
- Minimize polypharmacy and the potential adverse effects

Learn more about medications in lesson 5 on page 47.

## Eye exams and eye health

Diabetes can harm the eyes. It can damage the small blood vessels in the retina and the back wall of the eyeball. This condition is diabetic retinopathy. Diabetes also increases the risk of glaucoma and other eye problems. Learn more in lesson 1 page x on effects of diabetes on the body.

Regular eye exams are important.

An eye doctor who takes care of people with diabetes should do an eye exam every one to two years.

It may be difficult to know if the eyes have damage until the problem is very bad. An eye doctor can catch problems early. The early stages of diabetic retinopathy do not cause changes in vision so there will not be any symptoms.

Only an eye exam can detect the problem. After detecting a problem, it is possible to prevent the retinopathy from getting worse.

Vision problems may be associated with reduced quality of life. It affects vision functioning and the related symptoms. It also affects emotional well-being and social relationships.



#### **Quality of life**

Vision problems may affect quality of life and lead to decreased quality of life.

- · Life dissatisfaction
- · Physical and mental unhealthy days
- · Days of limited activity

#### **Dependence**

Vision problems may affect dependence on another for care.

- Difficulty with activities such as reading, socializing and pursuing hobbies.
- Increased difficulty performing self-care activities of daily living such as eating and dressing.
- Increased difficulty performing instrumental activities of daily living such as shopping, financial management, medication management and driving.
- Difficulty reading medication labels or following recipes.
- Difficulty recognizing faces and images.
- Difficulty manipulating small objects or doing tasks such as sewing.
- Difficulty moving/walking in crowded areas or climbing stairs.

#### **Mobility and falls**

Vision problems may affect mobility and falls.

- Loss of visual acuity, visual fields, depth perception or contrast sensitivity.
- Difficulty walking or going up or down steps.
- · Slowed gait speed while navigating obstacles.

#### Fractures and other injury

Vision problems may increase the risk for fractures and other types of injury.

- · Increased risk for hip fractures
- · Increased accidents
- Increased risk for injury requiring hospitalization

#### Mental health

Visual problems may be at a higher risk for mental health disorders

- Depression
- Anxiety
- · Other psychological problems

#### **Cognitive impairment**

Vision problems may increase progression of cognitive impairment. Cognitive impairment is trouble remembering, learning new things, concentrating or making decisions that affect everyday life.

#### **Hearing impairment**

Vision problems and hearing impairment are often coexisting. Diabetes may lead to hearing loss by damaging the nerves and blood vessels of the inner ear.

#### **Morbidity**

Vision problems may increase risk of morbidity (illness) because of accidents and falls, impaired ability for selfcare and disease management.

Discuss ways that you might support an individual who is experiencing decreased vision to support an improved quality of life.

Discuss ways that you might reduce the risk of falls for someone experiencing decreased vision.

## **Depression**

Depression is a serious, but treatable, mood disorder that involves the body, mood and thoughts. It affects the way the person eats and sleeps, feels about themselves and the way the person thinks about things.

Depression is not the same as a passing sad mood. It involves serious symptoms that last for at least several weeks and make it difficult to function normally.

With diabetes comes an increased risk of developing depression. If a person has depression, they may have a greater chance of developing Type 2 diabetes.

- Managing diabetes can be stressful and lead to symptoms of depression.
- Diabetes can cause complications and health problems that may worsen symptoms of depression.
- Depression can lead to poor lifestyle decisions such as unhealthy eating, less exercise, smoking and weight gain, which are risk factors for diabetes.
- Depression affects the ability to perform tasks, communicate and think clearly. This can interfere with the ability of successfully managing diabetes.

#### **Symptoms of depression**

- Social withdrawal
- Persistent sadness, irritability or despair
- Feelings of hopelessness, worthlessness, guilt or helplessness
- Decreased interest or pleasure in activities once enjoyed
- Difficulty concentrating, remembering or making decisions
- · Changes in appetite, weight gain or loss
- Changes in sleeping patterns either sleeping a lot or having difficulty sleeping
- A loss of energy, feeling tired despite little activity
- Persistent physical symptoms that do not respond to treatment, such as headache, chronic pain, weakness or constipation
- Suicidal thinking

#### **Treatment**

Depression can be a devastating disorder. For most people, treatment is highly effective with a combination of medications, therapy and lifestyle changes. That is why it is critical to recognize depression and treat it as soon as possible.

For people managing diabetes with depression, provide supporting behaviors to increase fitness levels and manage weight loss may improve sense of well-being and quality of life.

## **Lesson Summary**

- The person you care for may experience sexual issues as an effect of long-term diabetes.
- Cigarette smoking is a cause of Type 2 diabetes.
   Smokers have a 30% to 40% greater risk of developing diabetes than nonsmokers. The risk increases with the number of cigarettes smoked per day.
- This population (age 65 and older) is more at risk of developing diabetes-related complications like low blood sugar, kidney failure and heart disease than younger people living with diabetes.
- Older adults with diabetes were more likely to have high blood pressure, high cholesterol, heart disease, stroke, arthritis and cancer compared to younger adults with diabetes.
- Vision problems may be associated with reduced quality of life. It affects vision functioning and the related symptoms. It also affects emotional well-being and social relationships.
- With diabetes comes an increased risk of developing depression.

## **Checkpoint**

Read the statements below and indicate if they are true or false.

	True	False
Quitting smoking helps the body use insulin better and makes blood sugar levels easier to manage. People with diabetes who quit have better control of their blood sugar levels.		
An increased risk for yeast infections is due to elevated glucose levels.		
The costs of diabetes care are nothing to worry about for people with diabetes.		
Older adults with diabetes are at lower risk for depression and cognitive impairment compared with others their age who do not have diabetes.		
Many people with diabetes are managing additional coexisting chronic health conditions and complications.		
Being on multiple medications is a normal part of aging and multiple medications always interact well together.		
Vision problems may be associated with reduced quality of life. It not only affects vision functioning and the related symptoms, it also affects emotional well-being and social relationships.		



## **Module 2: Caregiving for Diabetes**

## **Lesson 4: Person-centered care**

The caregiver will recognize and identify strategies to provide person-centered care for individuals with diabetes.

## **Lesson 5: Medications, Treatments and Therapies**

The caregiver will identify possible medication side effects, ways to respond to side effects and recognize non-drug therapies to reduce some symptoms of diabetes.

## **Lesson 6: Nutrition**

The caregiver will understand and communicate about a nutrition plan.

## **Lesson 4 Person-centered care**

## **Objective:**

The caregiver will recognize and identify strategies to provide person-centered care for individuals with diabetes.

## **Overview**

Person-centered care is a way of thinking and doing. It considers the individual you provide care for as the experts in their own care.

Person-centered considers a person's desires, values, family situations, social circumstances and lifestyle. In the past, there was an expectation that people fit in with the routines and practices that caregivers felt were most appropriate.

Current thoughts consider the whole person. In personcentered care, we ask questions.

What is important to them? What is important for them? Listen respectfully and take action on what you learn. Person-centered care is about supporting an individual, not fixing them.

Diabetes is something that an individual lives with and may cause struggle. Diabetes does not make up the entirety of whom a person is and does. It does not show what may be important to the person.

## **Person-centered approach**

Remember that each person is a unique and worthwhile individual. This uniqueness comes from a lifetime of experiences influenced by many things. Influencers include:

- · Cultural background
- Religious upbringing and beliefs
- Gender and gender identity
- Sexual orientation
- · Marital status
- Economic status

- Social groups
- · Disability
- · How a person sees the world
- What he/she believes in
- Values
- What they consider acceptable ways to look and act
- · What they consider "normal"



Your reactions and feelings towards others happen automatically. This comes from your beliefs and values that are rooted in your own upbringing (culture). These may change over time. These are biases. Hidden biases can influence how you talk, see and do things for those individuals you care for.

Be aware of how your beliefs and values influence your interactions with others. Differences are neither good nor bad. The way you react to the differences is key.

Quality of life is subjective to each individual. Quality defined by one person may not be how another person defines quality.

- Get to know the person as a unique individual.
- What is important to a person?
- What is important for a person?

## Get to know the person

Get to know each person's uniqueness. This comes from having conversations with the person rather than having assumptions. Hold the individual at the center of the conversation about things that affect them.

When interacting with people, it is important to remember to use person-centered language. Language is a powerful tool that communicates how we value people. Person-centered language is about communicating in a respectful and considerate manner.

One way to value people is through the words we use when talking to them and about them.



Have respectful conversations with the individual. This will bring you closer to learning who the person is. Doing so, you may find ways to support the person in the best possible way.

- 1. Talk with the individual about things that affect them.
- 2. Learn about the person. Learn what is important to them.
- Take action to support the person in a way that makes sense.

## **Important to**

What is important to a person to create a more satisfied content and happy life?

What matters most to the person in their:

- Relationships
- · Things to do
- · Things to have
- · Places to go
- · Routines and rituals
- · Pace of life (rhythm)
- Status and control

Think about your own daily life. What are the things that provide consistency, comfort and control for you? How do you start your day? Do you have a routine in the morning? Do you eat at specific times? Do you have a bedtime routine? Are weekdays different from weekends in your routine?

On a piece of paper:

Write out your morning routine from the time you wake up until the time you leave the house or start your day.

(Write what you did this morning if you have no routine).

Trade your routine with someone else.

- Reflect on how you would feel if this was your new routine. What would you like or dislike about this new routine?
- Reflect on how the person you support would feel if the routine they follow is not their choice.

Share with the class.



## **Important for**

What is important for the person to manage health and safety?

- · Prevention and treatment of illness
- Safe environment free from fear
- Mental and physical wellness
- · Sense of value
- · Sense of contribution to community

Think about what may be important for someone who has diabetes based on what you know so far.

What would be important for the prevention and treatment of illness?

### **Balance**

It is often easier to learn what is important for a person. This includes health, safety and being a valued member of the community.

It is often more difficult to learn what is important to a person. This involves careful thinking and asking questions. This includes comforts, happiness, contentment, fulfillment, satisfaction and purpose.

It is important to have a balance between what is important to and what is important for an individual.

People are often motivated to do what is important for them if it helps to get more of what is important to them.



## **Person-centered practice**

Once you listen and learn about what is important to and for a person, you can take action on what you learned. The goal is a better life for the individuals you care for.

The best support combines three factors.

- 1. What is important for the person
- 2. What is important to the person
- 3. Connection to community

A person feels more supported for a better life when there is connection to community.

This includes a feeling of being a contributing member of the community, valued and recognized for contributions.

- · Take continuous action on what you hear
- · Be honest about limitations
- · Be honest about conflicts

Look at your daily routine created earlier. Think about ways that you might want to get support if you had diabetes.

Consider what is important to and important for.

In what ways could you support more connection with community?

## **Lesson Summary**

- What is important to a person to create a more satisfied content and happy life? What matters most to the person in their relationships, things to do, things to have, places to go, routines and rituals, pace of life, status and control.
- What is important for the person to manage health and safety? Prevention and treatment of illness, safe environment free from fear, mental and physical wellness, sense of value, and sense of contribution to community.

## **Checkpoint**

When providing care for individuals with diabetes, a person-centered approach would be to learn what is important to the person and what is important for the person. Identify if the information is important to or important for.

Important	То	For
1. Mental and physical wellness		
2. Pace of life		
3. Places to go		
4. Prevention and treatment of illness		
5. Relationships		
<b>6.</b> Routines and rituals		
7. Safe environment free from fear		
8. Sense of being valued		
9. Sense of contribution to community		
<b>10.</b> Status and control		
11. Things to do		
12. Things to have		

# Lesson 5 Medications, treatments and therapies

## **Objective:**

The caregiver will identify possible medication side effects, ways to respond to side effects and recognize non-drug therapies to reduce some symptoms of diabetes.

## **Overview**

Managing diabetes is the goal. Working with a health care professional, eating healthy and staying active are part of a healthy management plan.

Managing basic physical needs can reduce risk for complications of diabetes.

Some people who have Type 2 diabetes can achieve target blood sugar levels with diet and exercise alone. Many may also need diabetes medications or insulin therapy.

Remember that there should be an emphasis on the importance of individualizing treatments. In lesson 4, we discussed the importance of person-centered care. Disease management and medication are part of the person-centered approach.

Consider the person when determining goals of care. Consider life expectancy, comorbidities, functional status and risk for hypoglycemia.

Think about what you know about diabetes so far. Think about the types of treatments and therapies. Which would you want for yourself or a family member if receiving care? Think about ways it might support living a higher quality of life.



## **Lifestyle Tips**

Lifestyle changes are the key to diabetes management. People can live a healthy, full life with diabetes. Selfcare is as important as care from a doctor. This includes a daily diet and exercise plan. A doctor or nutritionist may be able to provide the best plan for the individual. Encourage and support the individual you care for to follow these lifestyle tips below. Depending on the care setting, these tips may or may not be relevant.

- Keep a journal with a record of daily blood sugar levels.
- Make a daily diet plan for each week (in-home care).
- Make daily selections from a pre-planned menu based on need (assisted living facility care).
- Eat balanced meals, with an emphasis on lean proteins, whole grains, and fresh fruit and vegetables.
- Add plenty of fiber to the diet.
- Schedule a time for exercise every day.
- Track walking steps every day by using a device.
- Track weight and lose weight if you need to.
- Track weight based on facility policy/procedure and/or prescriber orders.
- Record any symptoms.

## **Activities of Daily Living**

Activities of daily living (ADLs) are skills required to manage basic physical needs. This includes personal hygiene or grooming, dressing, toileting, transferring, ambulating and eating.

There are extra steps to manage diabetes and reduce the risk for complications.

## **Grooming**

#### **Oral Care**

People with diabetes are more likely to have problems with their mouths. Diabetes has a higher risk for periodontal (gum) disease. Gum disease is linked to heart disease.

Gum disease is an infection of the gum and bone that hold the teeth in place. Gum disease can lead to pain, bad breath that does not go away, chewing difficulties and even tooth loss.

Diabetes can slow down healing and can interfere with treatment of gum disease.



Diabetes can cause other problems such as dry mouth and thrush.

Dry mouth occurs from not enough saliva to keep the mouth wet.

Thrush is a fungal infection that causes painful white patches in the mouth.

When diabetes is not under control, it is more likely that problems will develop in the mouth.

Mouth care is important. People should brush with a soft-bristled brush after every meal and floss at least once per day.

#### Managing oral health

Manage oral health by supporting the individual to

- Control blood glucose
- · Brush twice a day
- Floss regularly
- Visit the dentist for routine checkups

Mouth care can help reduce

- Gum disease
- Fungus
- · Dry mouth

#### **Foot Care**

Foot care is important as well. Take care to check toenails once a week. Check for swelling or signs of infection. Ingrown toenails can lead to infection and other problems.

Many residents with diabetes see a podiatrist routinely for foot care.

Caregivers do not trim toenails for residents with diabetes.

#### **Managing foot health**

- Check feet daily. Look for cuts, redness, swelling, sores, blisters, corns, calluses, or any other change to the skin or nails. The individual may use a mirror for hard to see areas.
- Wash feet as directed in the negotiated service agreement/plan. Wash feet in warm (not hot) water.
   Do not soak feet. Dry the feet completely and apply lotion to the top and bottom of feet. Do not apply lotion between the toes. This could lead to infection.
- The person with diabetes should never go barefoot. Always wear shoes and socks or slippers, even inside to avoid injury. Check that there are not any pebbles or other objects inside the shoes and that the lining is smooth.
- Wear shoes that fit well. For the best fit, try on new shoes at the end of the day when the feet tend to be largest. Break in shoes slowly, wearing them for an hour or two a day at first until they are completely comfortable. Always wear socks with shoes.
- Trim toenails straight across and gently smooth any sharp edges with a nail file.
- Do not remove corns or calluses and do not use overthe counter products to remove them – they could burn the skin.
- Check feet at health care visits at least once per year.
- Maintain blood flow in feet. Encourage elevating feet while sitting and wiggling toes.
- Find feet-friendly activities including walking, riding a bike or swimming.

## Watch for symptoms that might need checked by a doctor.

- Pain in legs or cramping in buttocks, thighs or calves during physical activity
- Tingling, burning or pain in the feet
- Loss of sense of touch or the ability to feel heat or cold very well
- · A change in the shape of feet over time
- · Dry, cracked skin on the feet
- A change in the color and temperature of the feet
- · Thickened, yellow toenails
- Fungus infections such as athlete's foot between the toes
- A blister, sore, ulcer, infected corn or ingrown toenail

## **Bathing**

Mild soap and warm (not hot) baths or showers are best to prevent dry skin.

Support the individual to:

- Dry between toes.
- Use doctor-approved moisturizer except between toes.
- Check skin and feet for red spots, blisters and sores. A hand-held mirror may make it easier for the person to look in hard to see places.
- Wash minor cuts with soap and water.
- Check daily for healing, report concerns to the supervisor and/or the resident's doctor.

#### Managing skin health

Diabetes can affect many parts of the body, including skin. Monitor for changes in the skin and report to your supervisor and the individual's doctor.

Watch for:

- · Change in color
- Change in texture
- · Thickening of skin on fingers and toes
- Blisters
- Infections
- Sores and wounds

## **Dressing**

Good dressing care for feet is important for individuals with diabetes. As a rule, sandals and barefoot should be avoided, even when just walking around the house.

Soft leather shoes that lace-up with cushioned soles are most supportive. Shoes and slippers should have closed toes and socks should not be too tight to cut off circulation. For individuals with neuropathy, special "diabetic shoes" may be available and beneficial in minimizing foot injuries while walking.

## **Eating**

It is important to keep blood sugar levels as stable as possible. Eating meals at the same time every day with healthy snacks between is a good option. Eating several smaller meals throughout the day is also a good option. Skipping meals may cause blood glucose to drop.

In general, the individual should be following a meal plan created by the health care team.

Encourage drinking fluids like water and caffeine-free, naturally sugar-free drinks to keep the body and skin hydrated.

See more in lesson 6 on nutrition.

Louis Ramirez has diabetes and has dry mouth. How can you can support Louis to help reduce dry mouth?

Peggy Molina has diabetes and has trouble with blood flow in her feet. How can you support Peggy to help maintain blood flow in her feet?

Margaret Brown has diabetes and tries to check her skin daily. She has trouble checking hard to see places. How can you support Margaret to check hard to see places herself?

## **Talking about Diabetes**

Talking about diabetes may be hard for the individual. Opening up about the diabetes could relieve frustration of managing the diabetes. People may talk in their social circles about their diabetes. They may talk about how it changes their routine.



They may want to talk about how their eating has changed or how they take care of themselves.

As a caregiver, you can support the person by listening with compassion. You may need to assist in finding support groups. Support groups may offer support by others who understand what they may be going through.

Discuss the benefits of talking about diabetes. Discuss possible emotional and physical impact of diabetes. How does this support diabetes management.

## **Maintaining Sexual Health**

Yeast infections and erectile dysfunction are a concern for individuals with diabetes. Managing diabetes is the best strategy for sexual health.

See sexuality and intimacy on page 29 for more information.

## **Urinary Tract Infection**

People with diabetes have poor circulation. It reduces the ability of white blood cells to travel in the body and fight off any kind of infection. Combined with high blood glucose levels, it can also raise the risk of a Urinary Tract Infection (UTI).

A UTI is an infection in the urinary tract. The urinary tract includes the kidneys, bladder, ureters and urethra. It also includes the prostate in men. Most UTIs occur in the bladder. The bladder is the organ that stores the urine.

UTIs can be prevented. As a caregiver, you may support the individual through:

- Prompt and thorough perineal care (wiping front to back)
- If the resident is incontinent ensure prompt toileting and brief changes.



Support the individual to:

- Keep blood glucose levels within. target range as much as possible
- Drink plenty of fluids (mostly water).
- Consider drinking low-sugar cranberry juice or taking cranberry supplements.
- Eat yogurt that contains healthful bacteria called probiotics.

- · Wear cotton underwear.
- Urinate after having intercourse to help flush bacteria.
- Urinate frequently, resist holding urine in for too long.
- Wipe from front to back after voiding when using the toilet.

Signs and symptoms of UTI may include:

- Pain or burning during urination
- Feeling of having to urinate all the time, even though no urine may come out
- · Strong-smelling urine
- · Urine that is cloudy, dark or bloody
- · Fever or chills
- Confusion
- · Pain in back or abdomen

Contact the health-care provider right away, if any of the above symptoms are present.

For people with type 2 diabetes, UTIs are more common, more severe and carry worse outcomes.

- UTI is 10 times more common in women because of their anatomy.
- People with diabetes 65 and older have a five times higher rate of death from UTI.
- Reinfection is more common for people with diabetes.
- Other complications are more frequent in people with diabetes.

Treatment of UTI for people with diabetes compared to that of UTI in people without diabetes. Treatment for Type 2 diabetes depends on other factors.

These factors may include:

- · Presence of symptoms
- If the infection is in the bladder (lower UTI)
- Involves the kidney (upper UTI)
- · Severity of symptoms

Maria Cone is complaining that she has some pain in her back and feels chilled. She tells you that she does not have any pain. She has no burning during urination. She feels like she has to urinate more than usual and nothing comes out when she uses the bathroom. How can you support Maria?

## **Diabetes ABCs**

The diabetes ABCs help manage blood glucose, blood pressure and cholesterol.

#### A is for the A1C test

The A1C test shows average blood glucose over the past three months. This is different from the blood glucose checks that is done every day. The higher the A1C number, the higher the blood glucose levels have been during the past 3 months. High levels of blood glucose can harm the heart, blood vessels, feet and eyes.

The A1C goal for many people with diabetes is less than 7%.

## B is for blood pressure

Blood pressure is the force of the blood against the wall of the blood vessels. If that blood pressure gets too high, it makes the heart work too hard. High blood pressure can cause a heart attack or stroke and damage kidneys and eyes.

### C is for cholesterol

There are two kinds of cholesterol in the blood, mentioned in lesson 1. LDL and HDL. Managing the LDL or "bad" cholesterol is important. Some individuals may take medication to help manage cholesterol levels.

## S is for stop smoking

In lesson 3, you learned that not smoking is important for people with diabetes. Smoking and diabetes together narrows blood vessels, making the heart work harder.

## **Medication**

Medication is not a cure. The goal of medication is to maintain and give the best possible outcome.

Some people who have Type 2 diabetes can achieve target blood sugar levels with diet and exercise alone. Many may also need diabetes medications or insulin therapy.

Watch for possible side effects rather than focus on the specific medications.

If your job is to pass medications, you must know the specifics of each medication that you assist with/administer.



For caregivers who do not pass medications, the medications on the following page are for reference only. You do not need to learn this list. Your job is to know that there are possible side effects. Watch for changes from what is normal for the person you care for.

Some individuals might experience medication side effects when taking medications for diabetes. Some of those side effects might include:

- Anemia
- Diarrhea
- · Low blood sugar levels
- · Higher risk of diabetic ketoacidosis
- · Increased risk of heart failure
- Increased risk of pancreatitis
- · Joint pain
- · Low blood pressure
- Nausea
- · Urinary tract infections
- · Vaginal yeast infections
- Vomiting
- · Weight gain

Some symptoms might go away in a few weeks after the individual gets used to the medicine. Other medications may be better if taken with food. Check any changes and follow the protocol at your setting for reporting these changes.

In rare cases, some medications could cause serious conditions. Call a doctor and report to your supervisor right away if any of the following symptoms appear:

- Unusual weakness, tiredness or sleepiness
- Trouble breathing
- · Muscle pain that is not normal
- · Sudden stomach problems, such as vomiting

#### Handout

### **Medications and Side Effects**

#### **Metformin**

(Glucophage, Glumetza, others). Generally, metformin is the first medication prescribed for Type 2 diabetes. It works by lowering glucose production in the liver and improving the body's sensitivity to insulin so that the body uses insulin more effectively.

#### **Possible side effects:**

- Nausea
- Diarrhea

#### **Sulfonylureas**

These medications help the body secrete more insulin. Examples include glyburide (DiaBeta, Glynase), glipizide (Glucotrol) and glimepiride (Amaryl).

#### Possible side effects:

- · Low blood sugar
- · Weight gain

### Meglitinides

These medications — such as repaglinide (Prandin) and nateglinide (Starlix) — work like sulfonylureas by stimulating the pancreas to secrete more insulin, but they're faster acting, and the duration of their effect in the body is shorter.

#### Possible side effects:

- · Low blood sugar
- · Weight gain

#### **Thiazolidinediones**

Like metformin, these medications — including rosiglitazone (Avandia) and pioglitazone (Actos) — make the body's tissues more sensitive to insulin.

#### Possible side effects:

- Weight gain
- · Increased risk of heart failure
- Anemia

#### **DPP-4** inhibitors

These medications — sitagliptin (Januvia), saxagliptin (Onglyza) and linagliptin (Tradjenta) — help reduce blood sugar levels, but tend to have a very modest effect.

#### Possible side effects:

- Joint pain
- · Increased risk of pancreatitis

#### **GLP-1** receptor agonists

These injectable medications slow digestion and help lower blood sugar levels. Their use is often associated with weight loss.

#### Possible side effects:

- Nausea
- Increased risk of pancreatitis

#### **Exenatide**

(Byetta, Bydureon), liraglutide (Victoza) and semaglutide (Ozempic) are examples of GLP-1 receptor agonists. Recent research has shown that liraglutide and semaglutide may reduce the risk of heart attack and stroke in people at high risk of those conditions.

#### **Possible side effects:**

- Nausea
- Vomiting
- Diarrhea
- Dizziness
- Headache

#### **SGLT2** inhibitors

These drugs prevent the kidneys from reabsorbing sugar into the blood. Instead, the sugar is excreted in the urine. Examples include canagliflozin (Invokana), dapagliflozin (Farxiga) and empagliflozin (Jardiance). Medications in this drug class may reduce the risk of heart attack and stroke in people with a high risk of those conditions.

#### Possible side effects:

- · Vaginal yeast infections
- · Urinary tract infections
- · Low blood pressure
- · Higher risk of diabetic ketoacidosis
- Canagliflozin, but not the other drugs in the class, has been associated with increased risk of lower limb amputation

#### Insulin

Some people who have Type 2 diabetes need insulin therapy. In the past, insulin therapy was used as a last resort. Now, it is often prescribed sooner because of its benefits.

#### Possible side effects:

• Low blood sugar (hypoglycemia)

Normal digestion interferes with insulin taken by mouth. Insulin is injected or inhaled. A doctor may prescribe a mixture of insulin types to use throughout the day and night. There are many types of insulin, and they each work in a different way.

Often, people with Type 2 diabetes start using insulin with one long acting shot at night. Insulin glargine (Lantus) or insulin detemir (Levemir) are long acting.

Taking medications correctly is important. This includes:

- · Getting prescriptions filled
- Remembering to take the medication on time
- · Understanding the directions

It may be important to provide reminders when it is time to take medications.

In an assisted living facility or adult family home, staff might manage these tasks.

Be aware of medication side effects and report any adverse reaction as soon as possible.

Discuss medication side effects. When should you call a health-care professional?

## **Laughter and Positive Focus**

With diabetes comes a risk for depression. Staying positive and being happy can have a positive effect on quality of life.



Laughter may have many positive effects such as:

- Deep breathing
- · Increased blood flow to the heart
- · Burning calories
- · Relaxing tense muscles
- · Stress reduction
- · Immune system boosting
- Release endorphins

Positive outlook and positive thoughts can lead to positive outcomes.

## **Uncontrolled Diabetes**

Lesson 1 covered the effects of diabetes on the body. Because most of these effects can take a toll on the body, it is important to control the diabetes as much as possible.

Uncontrolled diabetes may have long term and short-term effects on the body.

- · Heart and blood vessels
- Eyes
- Kidneys
- Nerves
- · Gastrointestinal tract
- Gums and teeth
- · Skin and feet

Support the person to seek out the appropriate healthcare providers as needed.

## **Health Care Provider Types**

The following health care providers provide health care services for people with diabetes. Each may make a valuable part of the care team.

In some settings, you may be closely familiar with these providers. In other settings, it might only be helpful to be aware of the types without interacting with them. Be familiar with any policies in your setting that may say who to contact.

## **Cardiologist**

A cardiologist is a doctor with special training and skill in finding, treating and preventing diseases of the heart and blood vessels.

## **Dentist and dental hygienist**

Dentists are doctors who specialize in oral health.

Dental hygienists work with the dentist to provide preventative oral care, cleaning teeth and examining them for signs of damage and disease.

Part of the oral care is gum care.

## **Diabetes Educator**

Credentialed diabetes educators are specialists in diabetes. They are healthcare professionals who have completed further study to focus their efforts on helping people with diabetes self-manage their diabetes effectively and prevent complications.

## **Endocrinologist**

An endocrinologist specializes in glands and the hormones they make. They deal with metabolism and the processes that make bodies work. This includes how the body changes food into energy and how it grows.

Diabetes is a disease of the pancreas, which is part of the endocrine system.

## **Eye doctor**

There are two main types of eye doctors: ophthalmologist and optometrist. An optometrist (OD) takes care of primary health care for the eye. An ophthalmologist also offers medical and surgical eye care.

Many people with diabetes experience complications with their eyes over time. See page 15 for effects of diabetes on the eyes.

## **Registered Dietitian Nutritionist**

A Registered Dietitian Nutritionist (RDN) is a food and nutrition expert. They are trained in medical nutrition therapy and nationally board certified. They educate individuals about healthy eating for their medical condition.

Diet plays a very important role in diabetes management. The help of an RDN can help create an eating plan that fits an individual's specific needs.

#### **Mental Health Professional**

Mental health professionals may include:

- Psychiatrist (MD or MO)
- Psychologist (PhD)
- Clinical social worker (LCSW or LISW)

These professionals can help deal with the day-to-day challenges of living with diabetes. They can also help support other emotional issues.

## **Nephrologist**

A nephrologist is a doctor that specializes in the treatment of kidney disease.

A nephrologist manages kidney disease and administers dialysis.

## **Physical Therapist**

Physical therapists prescribe physical activity for treatment of diabetes.

### **Podiatrist**

A podiatrist is a doctor of podiatric medicine (DPM). This is a doctor and surgeon who treats feet, ankles and legs.

A podiatrist can check the feet for serious infections. Infections can lead to gangrene and amputation. The podiatrist can provide routine foot and toenail care and recommend special shoes.

#### **Pharmacist**

A Pharmacist (PharmD) is a professional who knows about medicines. They know what is in them and how they interact with each other.

## **Primary Care Provider**

A primary care provider monitors diabetes at regular checkups. They perform blood tests to check for disease and risk factors.

Primary care providers on the team may include:

- Physician/Medical Doctor (MD)
- General Practitioner (GP)
- Registered Nurse (RN)
- Licensed Practical Nurse (LPN)
- Nurse Practitioner (NP, ARNP)
- Medical Assistant (MA)
- Naturopathic Physician (ND)
- Physician's Assistant (PA-C)

#### **Other Resources**

Other resources may be available that are not listed here. Resources may include support groups, crisis prevention programs, hospital resources and cooking demos.

Share resources for diabetes support.

## **Lesson Summary**

- Lifestyle changes are the key to diabetes management.
   People can live a healthy, full life with diabetes.
- Activities of daily living (ADLs) are skills required to manage basic physical needs. This includes personal hygiene or grooming, dressing, toileting, transferring, ambulating and eating.
- There are extra steps to manage diabetes and reduce the risk for complications.
- Diabetes can affect many parts of the body, including skin. Monitor for changes in the skin and report to your supervisor and the individual's doctor.
- For people with Type 2 diabetes, UTIs are more common, more severe and carry worse outcomes.
- The diabetes ABCs help manage blood glucose, blood pressure and cholesterol.
- Some individuals might experience medication side effects when taking medications for diabetes. In rare cases, some medications could cause serious conditions.

## **Checkpoint**

Read the questions below and select the best answer from the choices provided.

1.	<ul> <li>When caring for feet, support the individual to:</li> <li>A. Soak feet daily in hot water and use lotion between the toes.</li> <li>B. Check feet every day for cuts, redness, swelling, sores, blisters, corns, calluses, or any other change to the skin or nails. Use a mirror for hard to see areas.</li> <li>C. Walk daily with bare feet and avoid wearing shoes, socks or slippers.</li> <li>D. All of the above</li> </ul>
2.	When managing oral health, support the individual to:  A. Control blood glucose  B. Brush twice a day and floss regularly  C. Visit the dentist for routine checkups  D. All of the above
3.	What are the ABCs of diabetes management?  A. An easy way to manage diabetes  B. Managing blood glucose, blood pressure and cholesterol and stop smoking  C. Airway, breathing and circulation  D. All of the above
4.	Read the list of medication side effects below. Place a check in each box for potential side effects of various
	diabetes medications.
	Anemia
	Anemia
	☐ Anemia ☐ Diarrhea
	<ul><li>☐ Anemia</li><li>☐ Diarrhea</li><li>☐ Higher risk of diabetic ketoacidosis</li></ul>
	<ul> <li>☐ Anemia</li> <li>☐ Diarrhea</li> <li>☐ Higher risk of diabetic ketoacidosis</li> <li>☐ Increased risk of heart failure</li> </ul>
	<ul> <li>□ Anemia</li> <li>□ Diarrhea</li> <li>□ Higher risk of diabetic ketoacidosis</li> <li>□ Increased risk of heart failure</li> <li>□ Increased risk of pancreatitis</li> </ul>
	<ul> <li>□ Anemia</li> <li>□ Diarrhea</li> <li>□ Higher risk of diabetic ketoacidosis</li> <li>□ Increased risk of heart failure</li> <li>□ Increased risk of pancreatitis</li> <li>□ Joint pain</li> </ul>
	□ Anemia   □ Diarrhea   □ Higher risk of diabetic ketoacidosis   □ Increased risk of heart failure   □ Increased risk of pancreatitis   □ Joint pain   □ Low blood pressure
	□ Anemia   □ Diarrhea   □ Higher risk of diabetic ketoacidosis   □ Increased risk of heart failure   □ Increased risk of pancreatitis   □ Joint pain   □ Low blood pressure   □ Nausea
	□ Anemia   □ Diarrhea   □ Higher risk of diabetic ketoacidosis   □ Increased risk of heart failure   □ Increased risk of pancreatitis   □ Joint pain   □ Low blood pressure   □ Nausea   □ Urinary tract infections
	Anemia   □ Diarrhea   □ Higher risk of diabetic ketoacidosis   □ Increased risk of heart failure   □ Increased risk of pancreatitis   □ Joint pain   □ Low blood pressure   □ Nausea   □ Urinary tract infections   □ Vaginal yeast infections

## **Lesson 6 Nutrition**

## **Objective:**

The caregiver will understand and communicate about a nutrition plan.

## **Overview**

Nutrition is eating a healthy and balanced diet. Food and drink provide the energy and nutrients needed to be healthy.

You may find different information, views, ideas and thoughts about nutrition. There is so much information available on what to eat and what not to eat. This lesson provides a solid foundation of information about nutrition and its effect on diabetes.

The U.S. Department of Agriculture (USDA) created the food pyramid in 1992. The food pyramid illustrated the elements of a healthy diet. The food pyramid was retired in 2005. MyPyramid replaced the food pyramid. USDA scientists, nutrition experts, staff members, consultants and a variety of food industry representatives created MyPyramid.

Scientists continue to learn more about the connection between diet and health. Nutrition recommendations promote health and longevity.

When possible, connect and work with the health care team. Learn ways to support nutritional wellness understanding the recommended nutrition plan. You can support the person you care for on their journey toward wellness and managing their diabetes. This is possible when you learn more about nutrition, nutrients and how they affect diabetes.

Reflect on ways that you would want to support in nutrition planning for yourself.

Discuss differences and similarities in preferences. Consider likes, dislikes, culture, tradition and other factors.

Share how you would feel if your personal nutrition plan included things that did not match your preferences.

## Working with the HealthCare Team

There is no diabetes diet. People who are at risk for or have diabetes should talk with their doctor and an RDN Registered Dietitian Nutritionist (RDN). An RDN can help to create a nutrition plan that considers the whole person.

The nutrition plan should be person-centered. It should be specific to each individual person based on:

- Lifestyle
- Culture
- Preferences
- Goals
- Other illnesses

The plan should support the specific needs of each individual person. It might be challenging in long-term care facilities to offer a specific meal plan. It may be challenging when there are pre-written menus.

You may work with the health care team, client care manager, health and wellness or nurse manager or the individual to learn the nutrition plan and how you might support the individual to follow the nutrition plan.

Working together and communicating about the plan is important to promote a higher quality of life for the person you care for.

## **Macronutrients**

Macronutrients are a type of food required in large amounts in a diet.

The body needs macronutrients in larger amounts to function. Macro means large. These nutrients provide the body with energy measured in the form of calories. There are three types of macronutrients.

- Carbohydrates
- Proteins
- Fats

There is no one-size-fits-all amount. Each person is different. A personalized approach is the best approach when possible.

Each macronutrient type listed below explains how each effects diabetes.

## **Carbohydrates**

The body needs carbohydrates (carbs) for energy. Optimal brain function requires carbs. There are three main types of carbs in food.

- Starches
- Sugar
- Fiber

The term "total carbohydrate" on a nutrition label refers to all three of these types of carbs.

The best sources of carbs are whole grains, fruits and vegetables. These sources are slower to digest. Whole grains, fruits and vegetables keep blood sugar and insulin levels from rising and falling too quickly.

For individuals with diabetes, dietitians recommend pairing carbohydrates with a source of protein or fat. This slows down the digestion of the carb.



**Eat the most:** whole, unprocessed non-starchy vegetables for little impact on blood sugar.

- Broccoli
- Cucumbers
- · Green beans
- Lettuce
- Celery

**Eat more:** whole, minimally processed carbohydrate foods. These foods take more time to digest and cause a slower rise in blood sugar.

- Apples
- Barley
- · Black beans
- Blueberries
- · Brown rice
- Cantaloupe
- Chickpeas
- Corn
- · Green lentils
- Green peas
- · Kidney beans
- · Oats/oatmeal
- Plantain
- Pumpkin
- · Quinoa
- Strawberries
- Sweet potatoes
- · Whole grain pasta
- · Whole wheat bread

**Avoid or eat less:** refined highly processed carbohydrate foods with added sugar. These can cause a fast spike in blood sugar.

- Cake
- Candy
- Chips
- Cookies
- luice
- Soda
- · Sugary cereal
- Sugary drinks
- · Sweet tea
- · White bread
- White rice
- White pasta
- Potatoes

#### **Carbohydrate Counting**

In diabetes meal planning, some individuals may count carbs. Some may have goals for the amount of carbs to eat at each meal. Most long-term care facilities will not count the carbs for the individual.

In general, 1 serving of food carbohydrate has about 15 grams of carbohydrates. Check the serving sizes with measuring cups and spoons or a food scale. Read the nutrition facts on the food labels to find out how many grams of carbohydrate are in foods.

Counting carb servings may help to control blood glucose levels with diabetes. The balance between the carbohydrates consumed and insulin determines what the blood glucose level will be after eating. Carb counting can also help in meal planning.

#### **Eat a Rainbow**

Eat at least eight to ten servings of fruits and vegetables every day in a rainbow of colors. Vegetables contain disease fighting vitamins, minerals, fiber, phytonutrients, antioxidants and anti-inflammatory molecules.



#### **Sugar**

Sugar is a carbohydrate and therefore occurs naturally in all carbohydrate containing foods. This includes foods such as fruits and vegetables, grains and dairy.

Consuming whole foods (in their natural state) that contain natural sugar is healthier. Other nutrients within the food such as fiber, minerals and other macronutrients will slow digestion. The sugar in them offers a steady supply of energy to the cells.

Manufacturers may add sugar to products to increase flavor and shelf life. Consuming these products may cause health problems.

Foods with added sugar include

- · Soft drinks
- · Fruit drinks
- · Flavored yogurts
- Cereals
- Cookies
- Cakes
- Candy
- · Most processed food.

Items such as soups, bread, cured meats and ketchup may have added sugar.

Diets high in foods and beverages with added sugar can affect obesity, diabetes, and heart health.

Consuming too much sugar may lead to

- · High insulin levels
- · High blood pressure
- Chronic inflammation
- Contribute to poor sex drive
- · Contribute to weight gain
- · Fatty-liver disease
- Other diseases including cancer and depression

Reading food labels carefully is the best way to watch sugar intake. Cut back or avoid the following sugar ingredients:

- · Brown sugar
- · Corn sweetener
- · Corn syrup
- Fruit juice concentrates
- High-fructose corn syrup
- Honey
- Invert sugar
- Malt sugar
- Molasses
- Syrup sugar molecules ending in "ose" (dextrose, fructose, glucose, lactose, maltose, sucrose)

Identify healthy carbs that make up a rainbow.

#### **Proteins**

Protein is an essential macronutrient found throughout the body. Protein is in muscle, bone, skin, hair and virtually every other body part or tissue. Protein is made from twenty-plus basic building blocks called amino acids.

Protein has a minimal effect on blood sugar levels. Blood sugar levels remain stable after protein consumption.

Include protein, even in small amounts with each meal to help feel satisfied longer. When it comes to diabetes risk, the source of protein matters more than the protein quantity.

Eating more red meat predicts a higher risk of type 2 diabetes. Eating more nuts, legumes and poultry predicts a lower risk.



#### Eat the most:

- Nuts: almonds, walnuts, pecans, peanuts, hazelnuts and pistachios
- Seeds: pumpkin, sunflower, sesame, chia, flax
- Beans: black beans, navy beans, garbanzos, lentils and other beans (These foods are high in fiber so also contain carbohydrate)
- Tofu
- Quinoa

#### Eat more:

- Fish: salmon, tuna, mackerel
- · Poultry: chicken, turkey
- Eggs

#### Avoid or eat less:

- · Red meat
- Butter

Do people need to eat meat to get protein?

#### **Fats**

Fat is the last of the three essential macronutrients in our diet. Fats help the body use vitamins and keep the skin healthy. Fats are also the main way the body stores energy.

In food, there are many types of fats. Some fats are considered healthy. These should be included in food choices. Other fats are considered unhealthy. These should be minimized.

Fat has little, if any, effect on blood sugar levels. Although, a high fat intake does appear to contribute to insulin resistance.

#### **Healthy fats**

Unsaturated fats are considered healthy. They do not raise blood cholesterol. Unsaturated fats are normally plant oils that are liquid at room temperature. This includes olive oil, avocado oil and sesame oil.



Eat more foods that contain healthy unsaturated fats. Unsaturated fats help the brain and immune system. Unsaturated fats can be found in foods such as

- Almond butter
- Avocado
- Fish like salmon, tuna
- Nuts like almonds, pecans, cashews, walnuts
- Olives
- · Seeds like: pumpkin, sunflower, sesame, chia

#### **Unhealthy fats**

The American Diabetes Association recommends limiting the amount of saturated fats and cholesterol in the diet. This is to aid in maintaining normal blood cholesterol and triglyceride (lipid) levels.

Saturated fats contribute to LDL (bad) cholesterol.
Saturated fats may also contribute to insulin resistance.
Saturated fats are in foods such as:

- Butter
- Cheese
- · Chicken fat
- Chicken skin
- Coconut oil
- Cream
- · Ice cream
- Meat
- · Milk
- · Palm oil

Trans fats, also called partially hydrogenated oils, should always be avoided. Trans fats are unhealthy because they raise the LDL (bad) cholesterol levels. They also lower the HDL (good) cholesterol levels. Trans fats may be found in processed food snacks such as:

- Candy bars
- Chips
- Coffee creamer
- Crackers
- Crisco
- French fries
- Frozen pizza
- Microwave popcorn
- · Refrigerated dough products
- · Some stick margarine

Read nutrition labels carefully to see if saturated or trans fats are listed on the label.

Identify foods that have healthy fats.

## **Meal Planning**

Meal planning is more than identifying the foods to eat. It is about making smart choices that work well for the individual.

You may be supporting someone with diabetes with meal planning, cooking and grocery shopping or preparing an extra meal or snack.

A basic understanding of nutrition and eating plan goals will help you to support the individual you care for.

#### **Nutrition Goals**

Nutrition goals for an individual with diabetes may include the following:

- Encourage eating patterns and physical activity that will improve health outcomes.
- Create a food plan based on appetite, preferred foods, usual eating and exercise habits.
- Integrate medication therapy, if needed.
- Use blood sugar information before and after meals to determine whether adjustments in food and meal planning are assisting the individual.
- Improve health through healthy food choices and physical activity.
- Respect the individual's wishes and willingness and ability to change.

## **Eating Plan Goals**

Nutrition assessment and treatment goals determine macronutrient amounts for the individual. Consider personal preferences such as tradition, culture, religion, health beliefs, goals and budget.



Caregivers should:

- Understand how to read a nutrition label
- Understand what foods contain carbohydrates
- Understand fats
- Understand protein and fat content (energy intake) of the food plan in addition to carbohydrate content.
- Use blood sugar data before and after meals to adjust meal planning or if any medications need to combine with nutrition therapy.
- Space meals. Meals can be three meals a day or smaller meals with snacks between meals. This is based on the individual's schedule and preferences. Consistency in meal timing and carbohydrate content is important.

#### **Meal planning tips**

The meal planning tips here may be helpful for awareness. Individuals living in long-term care facilities may not have opportunity to plan their own meals.

- An Eating Plan tells how many carbohydrate servings to eat at meals and snacks. For many adults, eating three to five carbohydrate foods at each meal and one or two carbohydrate servings for each snack works well.
- In a healthy eating plan, most carbohydrates come from:
  - At least eight to ten servings of fruits and nonstarchy vegetables
  - At least six servings of grains, beans and starchy vegetables, with at least three servings from whole grains
- Checking blood glucose level regularly. It can indicate when to eat carbohydrates.
- Eat foods that have fiber, such as whole grains, fruits and vegetables
- Minimize salty foods
- Eat at least four to six ounces of protein foods each day
- · Eat some healthy fats
- Eat very little saturated fats
- · Eat very little or no trans fats



## **Diet Choices**

Many different diet options may help manage diabetes. In 2008, the Harvard School of Public Health (HSPH) created the Healthy Eating Pyramid.

The Healthy Eating Pyramid is based on the best available scientific evidence about the links between diet and health. This plan was created without the influence of food industry representatives.

American Diabetes Association recommends Mediterranean, low-carbohydrate, vegetarian and vegan diets to reduce A1C levels.

Whatever nutrition plan is developed, it is beneficial to include many non-starchy vegetables, limit or avoid added sugars and refined grains and include whole, minimally processed foods.

Each of these diets are outlined below.

## **The Healthy Eating Pyramid**

Read the pyramid this way:

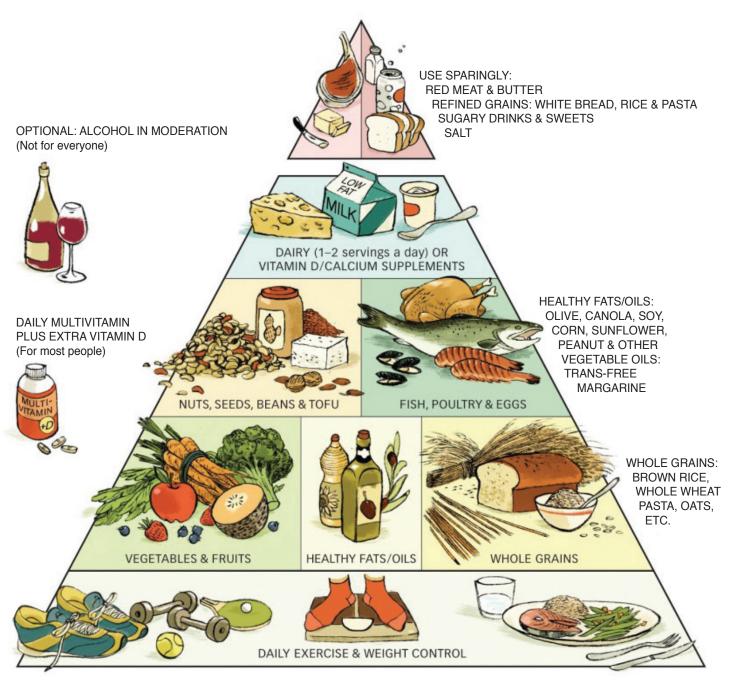
- The bottom row are the things to do the most.
- The top row are the things to do the least.

The focus of the Healthy Eating Pyramid is a foundation of daily exercise and weight control.

A house builder starts with a strong foundation at the base of a house. The Healthy Eating Pyramid starts with a strong foundation at the base for building a healthier body. The levels above the foundation support healthier bones, organs and skin.

## THE HEALTHY EATING PYRAMID

Department of Nutrition, Harvard School of Public Health



https://www.hsph.harvard.edu/nutritionsource/healthy-eating-pyramid/

#### **Levels of the Eating Pyramid**

According to the HSPH Healthy Eating Pyramid, a healthy diet is built on a foundation of regular exercise.

In lesson 2, we learned about preventing diabetes through regular exercise. Exercise is also important for people with a diabetes diagnosis.

Staying physically active can help reach and stay at a healthy weight. Staying active helps burn calories. The benefits of regular physical activity may help with

- Weight loss
- · Lower blood sugar
- · Boost sensitivity to insulin- which helps keep blood sugar within a normal range

The Healthy Eating Pyramid builds on the foundation of exercise with the next level up being:

- · Vegetables and Fruits
- Healthy fats and oils
- Whole grains

Above that, you will see healthy proteins such as:

- Tofu Nuts
  - Fish
- Eggs

- Seeds
- Poultry Beans

Above that and in moderation are:

- Dairy (one to two servings per day)
- Vitamin D and calcium supplement is recommended for those not consuming dairy.

At the top and disconnected from the main pyramid are items to eat sparingly such as:

- Red meat
- Butter
- Refined grains: white bread, rice and pasta
- Sugary drinks and sweets
- Salt

#### **The Healthy Eating Plate**

The Healthy Eating Pyramid, paired with the Healthy Eating Plate summarizes the best dietary information available today.

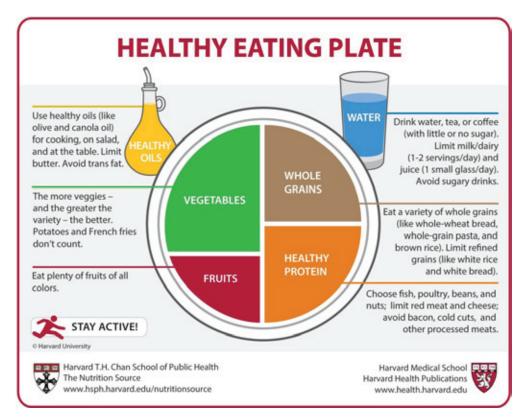
The healthy eating plate gives a visual of creating balanced meals. The meal served on a plate or packed in a lunch looks like:

• ½ plate: vegetables and fruits

• ¼ plate: whole grains

• ½ plate: protein

• Moderation: healthy plant oils



https://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/

### Mediterranean

The Mediterranean diet may reduce the risk of diabetes. It also reduce A1C and the risk of heart disease (CVD). (American Diabetes Association)

A Mediterranean diet is rich in fruits, vegetables and fiber. It is considered healthy for people with diabetes. Studies have linked a Mediterranean diet with a lower chance of developing diabetes.

A Mediterranean diet starts with a focus on simple, plant-based cooking. The majority of meals focus on fruits and vegetables, whole grains, beans and seeds, nuts. It has a heavy emphasis on cooking with olive oil.

Refined sugar and flour are rare. Saturated fats are occasional.

The diet encourages mealtimes with friends or family. The diet encourages a mindful eating approach and exercise for a healthy lifestyle.

#### **Healthy fats**

A Mediterranean diet includes good intake from healthy fat. This may include feta and mozzarella cheeses, yogurt, olive oil, avocado, oily fish and nuts.

#### **Proteins**

Beans, nuts, seeds, eggs, poultry and a moderate amount of red meat provide protein.

#### **Carbohydrates**

Pasta and bread provide carbs. Starchy vegetables also provide carbs.

Not everyone with diabetes can handle starchy foods. Watching blood sugar levels and moderating portion sizes may be important.

## Low-carbohydrate

Low-carb and very low-carb diets may reduce A1C. It may also promote weight loss and lower blood pressure. (American Diabetes Association)

Many people with diabetes follow a low-carb diet. This is sometimes referred to as a "diabetic diet". It has short-term benefits of improving diabetes, weight loss, can be satisfying and easy to stick to.

Low-carb diets are flexible and are a way of eating vegetables and natural, real whole foods.

Low-carb allows individuals to choose a level of carbohydrate that works well for their diabetes and lifestyle.

A low-carb diet consists of an intake of under 130g of carbs per day. Very low is under 30g of carbs per day. A healthy low carb diet should have:

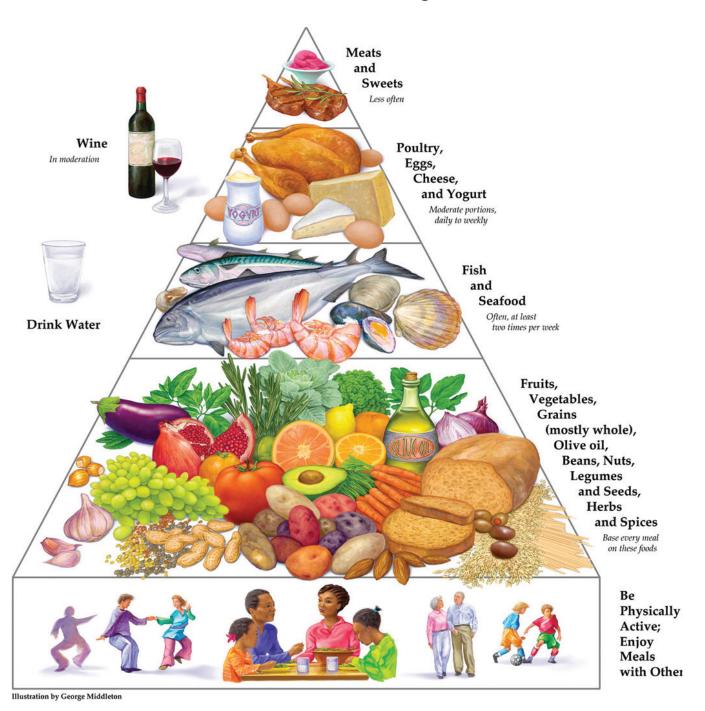
- · Lots of low-starch vegetables
- · Modest increase in fat from natural sources
- · Moderate protein intake
- · Low reliance on processed foods, sugar and grains

#### **Healthy fats and proteins**

- Meat
- Fish
- Dairy
- Eggs
- Nuts
- Avocado
- Olives
- · Olive oil

Processed foods, including processed meats, should be avoided.

## **Mediterranean Diet Pyramid**



https://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/



## Vegetarian

A vegan or vegetarian diet may reduce the risk of diabetes. It may also reduce A1C and promote weight loss. (American Diabetes Association)

Several studies have found that medication use significantly decreased when participants adopted any type of vegetarian or vegan diet.

A vegan diet has the most benefits for reducing the fasting plasma glucose levels of persons with diabetes.

A vegetarian diet today involves eating a variety of types of food. More detailed descriptions follow.

A **vegan** diet is a type of vegetarian diet. It is the most restrictive. It consists of whole plant foods such as grains, nuts, seeds, vegetables and fruits. No animal products are consumed in a vegan diet. That means no meat, fish, eggs, poultry, cheese or other dairy products.

Not all vegan food is healthy food. Avoid processed foods like sugar, bread, chips and cookies.

A healthy vegan diet should include low processed foods. Also a healthy balance of protein, carbohydrates, fat, vitamins and minerals.

- Fruits
- Vegetables
- · Leafy greens
- · Legumes (beans, peas, lentils, chickpeas)
- · Whole-grain bread
- Oats
- · Brown rice

- Nuts
- Seeds (flax, chia, hemp)
- · Soy products (tofu, tempeh)
- Nondairy milk
- Vitamin B12 supplement

The saturated fat in animal products can lead to inflammation. This makes insulin resistance and type 2 diabetes more likely. A healthy vegan diet is high in unsaturated fats.

Plant-based foods are high in fiber, antioxidants, minerals and polyphenols. These protect against diabetes and can help to control glucose level.

There is evidence that a healthy vegan diet may:

- Improve nerve damage (neuropathy)
- · Lower cholesterol
- · Aid in weight loss
- · Get A1C level under control
- Improve insulin sensitivity
- Lower blood pressure
- · Ease metabolic syndrome
- · Assist the body to make good gut bacteria.

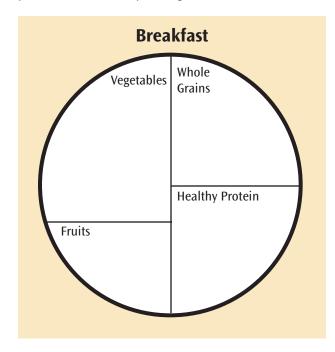
People often ask if a vegan diet can provide enough protein. Most adults need 46-56 grams of protein a day. Eating a variety of legumes, nuts and seeds throughout the day can meet this need. Soybean products like tempeh and tofu are also rich in protein.

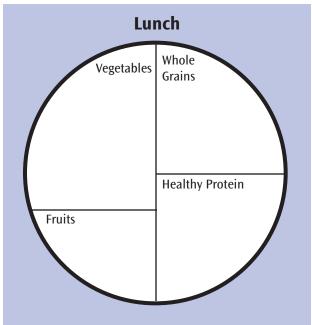
A lacto-ovo-vegetarian diet is one that consists of the same food items as a vegan diet. It does include dairy products and eggs.

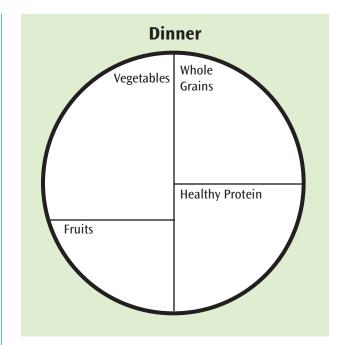
A pesco-vegetarian also consumes fish A semi-vegetarian consumes meat sometimes. The most important characteristic of these diets is the emphasis on whole grains, fruits and vegetables, legumes and nuts and reducing or limiting animal products.

## **Activity**

Using the healthy eating plate format below. Create a breakfast, lunch and dinner that you would personally enjoy and is healthy and nutritious. Share your plan with someone else. Discuss what you would like or dislike about each others plan. Consider the importance of person centered meal planning.







Notes

## **Reading Nutrition Labels**

Nutrition labels contain product-specific information such as serving size, calories and nutrient information.



## **Serving information**

Serving sizes are standardized to make it easier to compare similar foods. They use familiar units such as cups or pieces, followed by a metric amount, e.g., the number of grams (g).

The serving size reflects the amount that people typically eat or drink. It is not a recommendation of how much you should eat or drink.

Pay attention to the serving size. All nutrient information on the label is based on this serving size. This means that if a serving size equals one cup and two cups are consumed, you will need to double the amount of calories, carbohydrates, sugars, etc.

Look at the examples of a nutrition label and calculate two servings.

Example of a nutrition label:

Amount per serving	
Calories	280
Total Fat 9g	12%
Saturated Fat 4.5g	23%
Trans Fat 0g	
Cholesterol 35mg	12%
Sodium 850 mg	37%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

#### **Example of calculating servings:**

	One Serving	Two Servings
Serving Size	1 cup	2 cups
Calories	280	560
Total Fat	9g	18g
Saturated Fat	4.5g	9g
Trans Fat	0g	0g
Cholesterol	35mg	70mg
Sodium	850mg	1700mg
Total Carbohydrate	34g	68g
Dietary Fiber	4g	8g
Total Sugars	6g	12g
Added Sugars	0g	0g
Protein	15g	30g
Vitamin D	0mcg	0mcg
Calcium	320mg	640mg
Iron	1.6mg	3.2mg
Potassium	510mg	1020mg

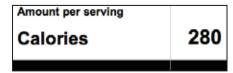
Discuss why it is important to pay attention to serving sizes.

## Servings per container

The number of servings contained in the package. For example, if a serving is equal to one cup and there are four servings per container, there are four cups in the package.

### **Calories**

Example:



Calories are a measurement of how much energy you get from a serving of the food. Remember that the number of calories is per serving. Multiply the number of servings consumed by the number of calories.

To achieve or maintain a healthy body weight, balance the number of calories consumed in food and beverages with the number of calories the body uses. The calorie needs of each person will vary depending on age, sex, height, weight and physical activity level.



#### **Nutrients**

The nutrition label shows key nutrients that impact health. Use the nutrition label information to choose healthy foods that support personal dietary needs.

#### Example:

Total Fat 9g	12%
Saturated Fat 4.5g	23%
Trans Fat 0g	
Cholesterol 35mg	12%
Sodium 850 mg	37%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

## Reduce saturated fat, sodium and added sugar intake

Saturated fat, sodium and added sugars are nutrients listed on the label that may be associated with adverse health effects. Americans generally consume too much of these nutrients. Eating too much saturated fat and sodium, for example is associated with an increased risk of developing some health conditions such as cardiovascular disease and high blood pressure. Consuming too much added sugars can make it hard to meet important nutrient needs while staying within calorie limits.

## **Total sugars and added sugars**

Total sugars on the Nutritional Facts label includes sugars that are naturally present in many foods and beverages. This includes sugar in milk and fruit as well as any added sugars that may be present in the product. There is no daily reference value for total sugars.

Added sugars on the Nutrition facts label includes simple sugars that are added during the processing of foods. This includes sugars such as sucrose or dextrose. It is found in foods packaged as:

- Table sugar
- Syrups
- Honey
- · Concentrated juices

Diets high in calories from added sugars can make it difficult to meet daily-recommended levels of important nutrients while staying within calorie limits.

Note: having the word "includes" before added sugars on the label indicates that added sugars are included in the number of grams of Total Sugars in the product.

Total Sugars 6g	
Includes 0g Added Sugars	0%

## Increase dietary fiber, vitamin D, calcium, iron and potassium

The following are nutrients that Americans generally do not get the recommended amount. Add more of these nutrients when meal planning.

- · Dietary fiber
- Vitamin D
- Calcium
- Iron
- Potassium

Plan a diet high in dietary fiber. It can increase the frequency of bowel movements, lower blood glucose, cholesterol levels and reduce calorie intake.

Diets higher in vitamin D, calcium, iron and potassium can reduce the risk of developing osteoporosis, anemia and high blood pressure.

## **Daily Value Percentage**

The % of Daily Value (%DV) is the percentage of the Daily Value for each nutrient in a serving of the food. It is based on 2,000 calorie diet for healthy adults. The Daily Values are reference amounts shown in grams, milligrams or micrograms of nutrients.

#### Example:

Total Fat 9g	12%
Saturated Fat 4.5g	23%
Trans Fat 0g	
Cholesterol 35mg	12%
Sodium 850 mg	37%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

The %DV shows how much a nutrient in a serving of a food contributes to a total daily diet. The %DV also helps to determine if a serving of food is high or low in a nutrient.

- If %DV has 5% or less of a nutrient per serving, it is considered low.
- If %DV has 20% or more of a nutrient per serving, it is considered high.

Choose foods that are:

- Higher in %DV for dietary fiber, vitamin D, calcium, iron and potassium. Consuming at least 100% the daily value is the goal.
- Lower in %DV for saturated fat, sodium and added sugars.

Look at the label above. Identify the %DV that is good in higher %DV vs good in lower %DV. Identify the %DV that are not good.

## **Guidelines for carbohydrates**

Look at the total grams of carbohydrate in the serving size on nutrition labels. The information on the label is based on this portion.

One carbohydrate choice is equal to 15 grams of carbohydrate.

#### For example:

Carbohydrate Grams/ Choice	Carbohydrate Choices
6-11	1/2
11-20	1
21-25	1 ½
26-35	2
36-40	2 ½
41-50	3
51-55	3 ½
56-65	4
66-70	4 1/2
71-80	5

Using the nutrition facts label on the next page, how many carbohydrate choices if one serving is consumed? What if two servings is consumed? What if the entire package is consumed?

Nutrition Facts	
8 servings per container Serving size	2/3 cup (55mg)
Amount per serving Calories	230
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160 mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 0g Added Sugars	0%
Protein 3g	
Mitaria D. Orran	400/
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%
*The % daily Value (DV) tells y much a nutrient in a serving of	ou how food

contributes to a daily diet. 2,000 calories a day is used for general

nutrition advice.

## **Lesson Summary**

- There is no diabetes diet.
- Macronutrients are a type of food required in large amounts in a diet.
- The body needs macronutrients in larger amounts to function. Macro means large. These nutrients provide the body with energy measured in the form of calories. There are three types of macronutrients. Carbohydrates, proteins and fats.
- Sugar is a carbohydrate and therefore occurs naturally in all carbohydrate containing foods. This includes foods such as fruits and vegetables, grains and dairy.
- The American Diabetes Association recommends limiting the amount of saturated fats and cholesterol in the diet.
- Saturated fats are in foods such as butter, cheese, chicken fat, chicken skin, coconut oil, cream, ice cream, meat, milk and palm oil.
- Many different diet options may help manage diabetes. The Mediterranean, low-carbohydrate and vegetarian diets are among diet options.
- Serving size on the Nutrition label reflects the amount that people typically eat or drink. It is not a recommendation of how much you should eat or drink
- Servings per container is the number of servings contained in the package.
- The nutrition label shows key nutrients that impact health.
- Total sugars on the nutrition label includes sugars that are naturally present as well as any added sugars.

# **Checkpoint**

Read the statements below. Select the best answer option from the choices provided.

**1.** There are three main types of carbohydrates in food.

	A. Starch, protein, fat		
	<b>B.</b> Sugar, starch, fiber		
	C. Fiber, starch, fat		
	<b>D.</b> All of the above		
2.	Product(s) that contains sugar added by a manufacturer to increase flavor and shelf life.		
	A. Soda/pop		
	B. Fruit juice		
	C. Flavored yogurts		
	<b>D.</b> All of the above		
3.	3. Protein may come from many sources including:		
	A. Nuts, seeds, beans		
	<b>B.</b> Fish, poultry, eggs		
	C. Tofu		
	<b>D.</b> All of the above		
<b>4.</b> Fats help the body use vitamins and keep the skin healthy. Fats are also the main way the body stores energy. Sources of healthy fats include:			
	A. Avocados, olives, nuts		
	B. Ice cream, milk, palm oil		
	C. Candy bars, chips, coffee creamer		
	<b>D.</b> All of the above		
5.	There is one preferred diet for people with diabetes.		
	A. True B. False		
6.	All nutrient information on the nutrition label is based on calories.		
	A. True B. False		
7.	Calories are a measurement of how much energy you get from a serving of the food.		
	A. True B. False		
8.	To improve health, a person should reduce saturated fat, sodium and added sugar intake.		
	A. True B. False		
9.	To improve health, a person should reduce dietary fiber, vitamin D, calcium, iron and potassium.		
	A. True B. False		



# **Module 3: Communication**

### **Lesson 7: Respectful Communication Dynamics**

The caregiver will demonstrate an ability to recognize communication styles and ways to communicate effectively.

### **Lesson 8: Trauma Informed Care**

The caregiver will recognize that past traumas can affect current thinking, behaviors and actions and will identify strategies to provide trauma informed care.

# **Lesson 7 Respectful Communication Dynamics**

### **Objective:**

The caregiver will demonstrate an ability to recognize communication styles and ways to communicate effectively.

### **Overview**

Communication is transferring information from one place, person or group to another. Effective communication should be clear, respectful and free from judgment. This is important regardless of who you are communicating with.

Communication may occur through verbal and nonverbal methods. Focus on positive use of words. This can help nurture a healthier connection between you and the person you provide care for.

Use language that is free from judgment and stigma.



Stigma is labeling and identifying human differences by stereotyping. Stereotyping links a person to undesirable characteristics. Health related stigma reduces a person's quality of life. The following words can make a person seem unmotivated, unwilling and not caring.

- Uncontrolled
- Diabetic
- Noncompliant
- · Non-adherent

Words may cause feelings of shame and embarrassment. Feelings of shame may decrease motivation and increase the chance of a person not following their plan.

For some people, not following their plan may be a way of trying to gain control over their own lives. This may actually lead to physical harm.

Instead, use language that is strength based, respectful, inclusive and imparts hope.

Use words that focus on what is working rather than what is wrong, missing or abnormal. Believe in people and their capabilities, talents, abilities, possibilities, values and hopes.

Judgmental words can contribute to diabetes distress. Diabetes is a demanding complex disease. There are threats of possible complications. The distress comes from worries, concerns and fears related to the disease. Use person-centered language. This means the person is more than a diagnosis or disease. Defining people by their disease or descriptors can be negative.

Change the words you use. Words like "diabetic" or descriptors such as "suffers from" or "victim of" can be negative. Changing these words can end stereotypes, negative assumptions and generalizations.

Get to know the person and their preferences. The better method is to address the person by their preferred name or greeting.

Think about how you might feel if addressed as diabetic, victim or noncompliant.

How do you want to be addressed?

Does this differ from others in your social group or family?

### **Effective Communication**

Effective communication in the best of times can be difficult. Communicating with a person diagnosed with diabetes may add challenges. Diabetes is a complex disease and can be challenging to manage on a daily basis.

Effective communication should take a person-centered approach. Remember when communicating, the person comes first. The person is not the disease.

People deserve clear, respectful communication without judgment. Situations may become difficult.

Share feelings and thoughts in a way that is non-confrontational. Do this to avoid negative responses. Remain open and genuine in your communication.

It is ok to set limits on hostile or challenging behavior. Communicate in a non-emotional, non-judgmental way that the behavior is inappropriate. Be clear and calm when discussing possible consequences of continuing the behavior.

Effectively communicating with a person requires skills in:

- Clearly presenting information
- Actively listening to the other person
- Consistently matching your non-verbal expressions with the meaning of what you are saying.
- Do your best to ensure your messages are understood and accepted.

Effective communication is a way to engage the individual without judgement and stigma. It helps support and communicate goals and needs. This gives you the information needed to provide a higher level of support. A higher level of support can help improve quality of life.



### **Types of Communication**

#### **Verbal Communication**

Spoken words make up verbal communication. These are the words and sounds that we make to express ourselves.

#### **Nonverbal Communication**

Nonverbal communication is tone of voice, body language and proximity.

Tone of voice is how we say what we say, how we construct our words and the personality we communicate. Tone of voice includes changes in pitch and volume of your voice.

Body language includes posture, eye contact, facial expression and gestures. Gestures include movement of hands, face, or other parts of the bodies.

Proximity is closeness to another person. Proximity can show aggression when too close or fear when moving back.



Discuss types of body language that might be positive. What about negative?

# The ABCs of Effective Communication

#### **Active Listening**

Active listening is a communication technique that includes verbal and non-verbal skills.

- Listen to what a person says and how they say it. Listen for hesitations, timing and emotion.
- Show that you are paying attention by nodding your head, lean forward, use verbal cues such as "go on."
- Avoid interrupting too quickly.

#### **Body Language**

- Look for signs that the person is not OK even if they are saying they are OK verbally.
- Watch non-verbal communications. Is there is a difference between spoken words and facial expression or body language?
- Notice body language, keeping in mind cultural differences. (e.g. In some cultures, eye contact is not appropriate).
- Notice your own body language. Maintain eye contact, if appropriate, and avoid distractions. Be aware of crossed arms or legs. This may appear unwelcoming or judgmental.

#### **Clarify Information and Paraphrase**

- Reflecting and paraphrasing are techniques that communicate that you have been listening.
- Repeat some of the person's own words back to them (reflecting) as a question that can prompt more detail.
- Paraphrasing is to put what is said into your own words. This communicates that you have been listening. It verifies that what you paraphrased is what they meant to communicate.
- · Repeat key information.

### **Develop Rapport**

- Most people want someone who can help support their self-management efforts. They do not need someone who tells them what to do or criticizes them.
- Use motivational, collaborative language to show appreciation for the efforts the person makes.
- Create a good balance during conversations; let the person with diabetes do as much or more talking than you.
- Build trust through repeated positive interactions.

#### **Explain Clearly**

- Use plain English, avoid jargon, acronyms or shorthand without explanation.
- Provide information in writing if appropriate. Use plain language, bullet points and short sentences.
- Use diagrams, pictures, or models when appropriate.
- Storytelling and visual aids can be useful for explaining difficult concepts.

#### **Feedback**

- Give the person plenty of opportunity to tell you how they feel about their care plan (negotiated service agreement/negotiated service plan).
- Ask for feedback about care and support that you are providing.

#### **Give Clear Signals**

- Set up expectations on what will happen.
- Let the person know when you need to move on to another issue or task.
- Make sure the person does not feel dismissed or ignored.

#### Hear the Sound of Silence

- Do not feel the need to fill every quiet space with questions or advice.
- Silence allows the person time to gather their thoughts and express themselves.
- If a pause becomes too long, ask what they are thinking about.
- Remember that the person's body language will offer clues.

#### In conclusion

• Summarize the main issues at the end of the conversation.







### **Communication and Diabetes**

Communication is important for being supportive of a person's needs. The emotional impacts of diabetes can take a toll on emotional health.

Have conversations about how diabetes affects the person's emotional health. It can help them feel that someone understands their view.

Communicate about the challenges of managing the diabetes. It can help you understand ways you can offer support.



Some language you use may make a person feel judged. Language may make a person feel that they are not doing a good enough job managing their diabetes. Think about the language you use in communicating with someone who has diabetes.

Referring to blood sugar levels as "good" or "bad" may create negative feelings. The person may feel like they are doing something wrong when blood sugar levels are not in the expected range. Instead of saying blood sugar is "good" or "bad," try saying that the blood sugar is "in target range" or "out of target range."

Using "good" or "bad" to describe food can make a person feel bad for consuming the wrong foods. Referring to foods as "sometimes foods" and "everyday foods" is preferred.

Instead of:	Try this:
Blood sugar is "good" or "bad."	Blood sugar is "safe" or "unsafe."
Food is "good" or "bad."	Food is a "sometimes" or "everyday" kind of food.
Using the word "should"	Use the word "could"

Using the word "should" promotes feelings of shame and infers that we are doing something wrong. Using the word "could" is more empowering and highlights that there is a choice.

A person-centered and strengths-based approach is best for communication in diabetes.

Use language that is:

- Neutral, nonjudgmental and based on facts, actions or physiology/biology
- Free from stigma
- Strengths-based, respectful, inclusive and imparts hope
- Fosters collaboration between caregivers and the individuals they care for
- Person-centered

For suggestions to replace language with potentially negative meaning, see table above.

**Table: Suggestions to replace language** 

Use less	Use more	Reasoning
Compliant, compliance, noncompliant, noncompliance	takes medication about half of the timeeats fruits and veggies a few times per week. Engagement, participation, involvement, medication taking	Compliance and adherence are about what someone else wants. In diabetes care and education, people make choices and perform self-care/self-management. Focus on people's strengths and what they are doing wel
Control, controlled, uncontrolled, well controlled, poorly controlled	Manageis checking blood glucose levels a few times per weekis taking the prescribed medication and it is not bringing blood glucose levels down enough.	Control is virtually impossible to achieve in a disease where the body no longer does what it is supposed to do. Focus on strengths rather than on passing or failing language. Use words that do not blame or shame.
Diabetic person Are you diabetic?	Person with diabetes / person who has diabetes  Do you have diabetes?  Person living with diabetes	Person-first language puts the persor first. Avoid labeling someone as a disease. When in doubt call someon with diabetes by their name.
Nondiabetic, normal	Person who does not have diabetes  Person without diabetes	The opposite of "normal" is "abnormal"; people with diabetes ar not abnormal
Can/can't/shouldn't, do/don't, have to, need to, must/must not	Have you tried What about May I make a suggestion May I tell you what has worked for other people What is your plan for Would you consider	Be cautious with statements that make people feel they are being ordered around. Focus on statements that do not blame or shame or create guilt.
Prevent, prevention	Reduce risk, delay	There is no guarantee of prevention. Focus on what the person can do, which is lower the risk or delay onse
Refused	Declined	Use words that build on strengths an respect their right to make their own decisions.
Victim, sufferer, stricken, afflicted	lives with diabetes. has diabetes. diagnosed with diabetes.	Do not assume someone is suffering or a victim. Instead, empower the person and build on strengths.
Difficult person	<ul><li>has a sore that is not healing and is having a difficult time with offloading.</li><li>I'm having a difficult time with</li></ul>	Describe behavior as a fact rather than labeling the person.
Cheating, sneaking	Making choices/decisions	Use strengths-based language
Good, bad, poor	Numbers Choices Food Safe/unsafe	Good and bad are value judgements. Focus on physiology/biology and tasks/actions using neutral words

Read the sentences below and re-write the sentences to be replace negative language with more positive language. Use table above for reference.

1.	Martha is sneaking bad food like cookies and ice
	cream in the evenings when no one is looking.
	Re-Write

2. Sam is being a difficult person refusing his medications before he has his coffee.

Re-Write:

**3.** Sarah is non-compliant with her nutritional plan making her blood sugar poorly controlled.

**4.** Mark is diabetic and Helen is normal. Re-Write:

Re-Write:

### **Motivational Interviewing**

Motivational interviewing (MI) is an effective way of talking to people about change. The use of MI is to empower people to change behavior. The OARS model within motivational interviewing is essential in communication skills.

#### OARS stands for:

- · Open-ended questions
- Affirmations
- · Reflective listening
- Summarizing

OARS is a skill-based, person-centered interactive technique for communication. These skills include verbal and non-verbal responses. They include behaviors that need to be culturally sensitive and appropriate.

The OARS model combines five principles that help establish and maintain good relationships.

#### **OARS Model**

#### **Open-Ended Questions**

Ask open-ended questions in order to better understand who the person is and what they care about. It gives people the opportunity to tell their own story. Openended questions need answers that go beyond a yes or no answer.

- Create a safe environment.
- · Build connection.
- Build a trusting, respectful and professional relationship.
- Explore, clarify and gain an understanding of the person's world.
- Learn about their experiences, thoughts, feelings, beliefs and hopes for the future.

#### Looks like:

- Ask questions of who, what, when, where, how and tell me more about...?
- How can I help you with...?
- Help me understand...?
- How would you like things to be different?
- If you had one habit that you wanted to change to improve your health, what would it be?

#### **Affirmations**

Affirmations are statements and gestures. They recognize the person's strengths. They recognize behaviors that lead in the direction of positive change. This change can be big or small. Affirmations build confidence in the person's ability to change. To be effective, affirmations must be genuine.

- Build rapport, show empathy and affirm the person's strengths and abilities.
- Build a person's level of worth and a belief that they can be responsible for their own decisions and life choices.

#### Looks like:

- It's great that you are here today. It's not always easy...
- It sounds like you've been really thoughtful about your decision.
- You're really trying hard to...
- It seems like you are really good at...
- That's a good suggestion.
- Despite serious temptation, you were able to make healthful decisions for yourself.

#### **Reflective Listening**

Reflective listening engages others in relationships. It builds trust and fosters motivation to change. Reflective listening is having interest in what the person is saying. It is also respecting the person's inner wisdom.

Reflective listening includes paraphrasing where you repeat back in your own words what you hear the person say. Reflective listening also includes reflection of feeling. You can do this by emphasizing emotion through feeling statements.

- Listen to the person to help you gain a deeper understanding of their life.
- Listen, observe and share (reflect on) your own perceptions of what the person shares.
- Reflect on the words that they use.
- Reflect on behaviors and feelings.

#### Looks like:

- Words: Some of what I hear you say...
- Emotions: You seem to be feeling (sad, frustrated, excited, angry)...
- Behavior: I noticed... (tears in your eyes, your voice sounds shaky, you smiled when...)
- It sounds like you are frustrated by others making decisions for you.
- You mentioned that you won't go in public in a bathing suit because of your weight. That seems to make summertime very stressful for you.



Practice reflective listening with a partner. One person will play the role of Kim and one person will play the role of the caregiver. After reading the parts, take turns discussing what happened and how it felt.

Kim: "I wish I didn't eat so much fast food."

Caregiver: "You eat fast food fairly often."

Kim: "Pretty much every day. I know I shouldn't, but it's just easier."

Caregiver: "It's easier because you don't have to plan and cook meals."

Kim: "And I can just run over to the drive-through."

Caregiver: "So you don't want to give up the convenience of fast food, but you would like to eat healthier."

Kim: "Right. ... I guess there are some healthy items on the menu."

#### **Summarizing**

Summaries are part of reflective listening. Use this technique throughout the conversation. It is most helpful at transition points – such as the end of a conversation. It helps to ensure that communication is clear.

- Help move the conversation from the beginning, through the middle, to the closing.
- Check that you understand the person's goals and preferences.
- Confirm that the person has an understanding of key elements of a plan.

#### Looks like:

- So let's go over what we have talked about so far.
- Let me see if I understand so far...
- Here is what I have heard. Tell me if I've missed anything.
- A minute ago you said you wanted... Would you like to talk more about how you might...
- So you've described the plan. What other questions do you have today?
- I am wondering what you're feeling at this point.
- I am wondering what you think your next step should be.
- Let me see if I understand what you've told me so far.
- Here's what I've heard you tell me about your situation.



# **Increasing Confidence in Communication**

Communication takes time and practice to develop. Take the following steps to improve and increase your confidence in communication.

- 1. Practice active listening
- 2. Focus on nonverbal communication
- 3. Manage your own emotions
- 4. Ask for feedback

Practice these daily with family, friends, coworkers and those you provide care for. It will help you to increase your confidence and improve your communication skills.

In groups of three, practice effective listening using what you have learned in this lesson.

**Step 1:** One person takes a turn as speaker, the other as listener and the third person as the observer. For five minutes, the speaker elaborates on one of the suggested topics below. The listener uses effective listening and makes appropriate responses back to the speaker. The observer watches how the process between the listener and the speaker goes.

**Step 2:** After the five-minute role-play is completed:

- The speaker spends two minutes giving feedback to the listening partner on the effective listener skills used.
- The observer gives a two-minute feedback to the speaker on how well the listening was done.

**Step 3:** After the first practice and feedback session, switch roles until each participant has had the opportunity to be the listener.

#### **Listening topics:**

- 1. If I could choose one food to eat every day without consequence it would be this and here is why
- 2. My morning routine today before class was
- 3. Something good that happened to me
- 4. Somewhere I want to travel to in the future
- 5. Something I want to do in the future is
- 6. Being raised in my family of origin
- 7. A time when I dealt with a conflict well
- 8. How or why I became a caregiver
- 9. My favorite holiday and why
- **10.** My favorite way to be physically active

### **Lesson Summary**

- Nonverbal communication is tone of voice, body language and proximity.
- Using "good" or "bad" to describe food can make
  a person feel bad for consuming the wrong foods.
  Referring to foods as "sometimes foods" and "everyday
  foods" is preferred.
- In Motivational Interviewing (MI), OARS stands for: Open-ended questions, Affirmations, Reflective listening, Summarizing.

### **Checkpoint**

Read the statements below. Complete the statments by writing the correct word on each line provided.

1. The two main types of communication are and			
2. Nonverbal Communication is of voice	language and		
3. The ABCs of Effective Communication are Active			
language, Clarify information, Develop Rapport,	clearly,, Give clear signals,		
Hear the sound of silence and In conclusion.			
<b>4.</b> The OARS Model of Motivational Interviewing stands for	questions,,		
Listening,			

# Lesson 8 Trauma Informed Care

### **Objective:**

The caregiver will recognize that past traumas can affect current thinking, behaviors and actions and will identify strategies to provide trauma informed care.

### **Overview**

Trauma and adverse life events can have a lifelong impact on an individual. These events may have occurred throughout childhood or as an adult. Keep in mind that that current thinking, behaviors and actions are influenced by past trauma and events.

Trauma is an individual's experience of an event or enduring condition. It may be from an actual threat or perceived as a threat to their life and personal integrity.

Adverse life events are often associated with trauma responses. Many people have resilience to adverse life events and never develop trauma responses. Others experience symptoms of depression, anxiety and post-traumatic stress disorder (PTSD).

The perception of trauma is subjective. This means that people may see trauma in their own way and at different amounts of severity.

Take a few minutes to reflect on an event that occurred in your past. Did it make you feel bad, sad, stressed or threatened? Reflect on that event and how it may have influenced your life and behaviors.

# Adverse Childhood Experiences (ACEs)

Adverse Childhood Experiences (ACEs) are potentially traumatic events. These events occur in childhood (0-17 years). This includes parts of the child's environment that can damage their sense of safety, stability and bonding.

#### **Family dysfunction**

- 1. Mentally ill, depressed or suicidal person in the home
- 2. Drug addicted or alcoholic family member
- **3.** Parental discord divorce, separation, abandonment
- 4. Incarceration of any family member
- 5. Witnessing domestic violence

#### Abuse of child

- 6. Physical abuse
- 7. Sexual abuse
- 8. Emotional abuse

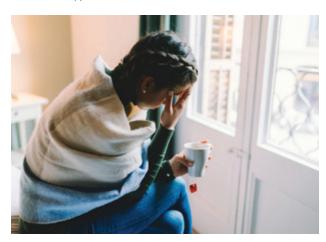
#### **Neglect of child**

- 9. Physical neglect
- 10. Emotional neglect

Why is this relevant to providing care for an adult diagnosed with diabetes? ACEs are linked to chronic health problems, mental illness and substance misuse in adulthood. ACEs are also common.

According to the Centers for Disease Control and Prevention (CDC):

- About 61% of adults surveyed across 25 states reported that they had experienced at least one type of ACE.
- Nearly one in six reported they had experienced four or more types of ACEs.



ACEs can have lasting, negative effects on health, well-being and opportunity.

These experiences can increase the risk of:

- Injury
- · Sexually transmitted infections
- · Maternal and child health problems
- Teen pregnancy
- Involvement in sex trafficking
- · A wide range of chronic diseases
- Cancer
- Diabetes
- · Heart disease
- · Early death

Approach people with kindness, compassion and an understanding. Recognize that the thoughts, actions and behaviors of an individual may be influenced by their past experiences and trauma. Learn more about behaviors in lesson 9.

Discuss the importance of potential ACEs when providing care.

#### **Trauma**

Trauma is one possible outcome of exposure to adversity. Many people experience trauma during their lifetimes.

Many people exposed to trauma have few or no lingering symptoms. Those who have experienced repeated, chronic, significant or multiple traumas are more likely to display noticeable symptoms and concerns.

Some symptoms and concerns include substance abuse, mental illness and health problems. Trauma can affect how an individual engages in life and treatment.

Trauma refers to experiences that cause intense physical and psychological stress reactions. It can refer to "a single event, multiple events, or a set of circumstances that is experienced by an individual as physically and emotionally harmful or threatening and that has lasting adverse effects on the individual's physical, social, emotional or spiritual wellbeing" (SAMHSA, 2012, p. 2).

Although many individuals report a single specific traumatic event, others have experienced multiple chronic traumatic events.

Traumas can affect individuals, families, groups, communities, specific cultures and generations. It generally overwhelms resources. It often ignites the "fight, flight, or freeze" reaction at the time of the event(s). Trauma frequently creates a sense of fear, vulnerability and helplessness.

Often, traumatic events are unexpected. Individuals may experience the traumatic event directly. They may also witness an event, feel threatened, or hear about an event that affects someone they know.

Events may be human made such as an explosion, crash, war, terrorism, sexual abuse, or violence. Events may be naturally occurring like flooding, hurricanes, and tornadoes.

Trauma can occur at any age or developmental stage. Often, events that occur outside expected life stages are perceived as traumatic. (e.g., a child dying before a parent, cancer as a teen, personal illness, job loss before retirement).

Trauma may occur indirectly from cultural experiences and historical traumas. This may occur even if the individual did not experience the trauma directly. For example, Native and African Americans experience historical trauma due to the treatment of their people. This occurs even if the person is younger and may have no direct experience with such negative treatment.

People may experience and interpret the same event in different ways. For most, regardless of the severity of the trauma, the immediate or lasting effects of trauma are met with resilience. Resilience is the ability to rise above the circumstances or to meet the challenges with strength.

For some people, reactions to a traumatic event are temporary. Others have prolonged reactions that move from serious symptoms to more severe. Others may experience mental health concerns and medical problems.

Mental health concerns may include post-traumatic stress, anxiety, substance abuse and mood disorders. Medical problems may include headaches and chronic pain.

### **Trauma and Diabetes**

Exposure to traumatic events may trigger changes in the immune system. It may also increase the risk of health problems, including diabetes.

One study found that exposure over time to ACEs was indirectly linked to a higher risk of diabetes in adulthood. In the study, people with three or more ACEs had a 59% increased risk of developing diabetes. This is compared with those without ACEs. Additionally, the study found for each increase in the number of ACEs, the risk of developing diabetes increased by 11%.

### Physical and emotional trauma

Physical and emotional trauma has an impact on a person's care and recovery. Trauma has an impact how a person cares for themselves.

# **Principles of Trauma Informed Care**

Trauma Informed Care (TIC) is an approach that aims to engage people with history of trauma. TIC recognizes trauma symptoms and acknowledges the role that trauma has played in people's lives.

Many people have had some level of trauma in their past. TIC is not about treating or managing symptoms of trauma. TIC is about getting to know each person and potential traumas. TIC is about being sensitive to issues or behaviors the person might have, related to past trauma.

Focus on what has happened to the person rather than what is wrong with the person.

Instead of asking "what is wrong with you?" Ask "what has happened to you and how can I support you?" TIC identifies traumatic events and views them not as past events, but as experiences that form the core of the person's identity.

Consider the five key principles of TIC when supporting the individual you care for.

- 1. Safety
- 2. Trustworthiness
- 3. Choice
- 4. Collaboration
- 5. Empowerment



### **Safety**

Safety is protection from danger, risk or injury. Safety is a key to promoting emotional and physical wellbeing. Promote safety in the environment you work and through personal interactions.

- Provide a warm and welcoming environment to increase a feeling of safety.
- Provide emotional support by acknowledging the hurt if they bring it up.

### **Trustworthiness**

Trust is a firm belief in the reliability, truth, ability or strength of someone or something. To be trustworthy is to be relied on as honest or truthful. It is a critical component for a person's healing and sense of safety. Strong relationships help create resilience and help shield from trauma.

- Be consistent between what you say and what you do.
- Communicate openly. Communication is essential for building trust.

### **Choice**

Choice is the ability one has to select their own preferences. Choice is part of person-centered planning. An individual is supported to plan their life and supports. Choice requires an awareness of options. Choices create opportunities for individuals and personal growth.

- Include the individual in choices.
- Provide limited, specific choices appropriate to where a person is in the disease process.

#### **Collaboration**

Collaboration is the action of working with someone to produce or create something.

In TIC, person-centered planning involves planning and goal setting. This is a collaboration between you, your organization and individuals receiving care. Collaboration is fostered when you see individuals as similar to yourself. This includes providing opportunity for individuals to add perspectives and concerns, when appropriate.

- Work together with management, staff, individuals and families to provide best care plans.
- Support your peers and other staff to work together.

### **Empowerment**

Empowerment gives power or authority. This means acknowledging skills and abilities of an individual. It means supporting that person to focus on abilities rather than disabilities.

- Encourage an individual's skills and abilities.
- Find new ways to work with people when something is not working or you are frustrated.

Andrea is a 65-year-old African American woman. She has a medical history of Type 1 diabetes. She also has nerve damage, PTSD, depression, migraines, asthma and recurrent shoulder dislocations.

In her past, she spent a lot of time in the hospital. This was to get away from physical, sexual and psychological abuse of her former partner.

Now that she is in your care, she is often resistive to care. Using the five key principles of TIC, discuss how you might support Andrea.

### **Trauma-Informed Approach**

Imagine if we interact with every person we meet as if we knew their story of hardship and trial and find ways to engage with them from that knowledge. This is a trauma-informed approach (TIA).

TIA is a way to gain the knowledge and skills needed to promote healing, recovery and wellness.

Be aware of the role that trauma can play in people's lives.

Accept symptoms and difficult behaviors as coping strategies.

Work collaboratively to create a safe and empowering environment for those seeking care.

The key is to provide quality care and reduce retraumatization.

Additional free training on Trauma-Informed Approach can be found online at https://tiawashington.com/.

### Resilience

Resilience is the capacity to recover quickly from difficulties. Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress.

Sources of stressors may include:

- Family and relationship problems
- · Serious health problems
- Workplace
- · Financial stressors

Improved resilience involves behaviors, thoughts and actions that anyone can learn and develop. Like building a muscle, increasing resilience takes time and intentionality.

Focusing on connection, wellness, healthy thinking and meaning can empower a person to withstand and learn from difficult and traumatic experiences.

Support the individual on engaging in self-care (see lesson 11).



### **Lesson Summary**

Adverse Childhood Experiences (ACEs) are potentially traumatic events. These events occur in childhood (0-17 years). This includes parts of the child's environment that can damage their sense of safety, stability and bonding.

Approach people with kindness, compassion and an understanding. Recognize that the thoughts, actions and behaviors of an individual may be influenced by their past experiences and trauma.

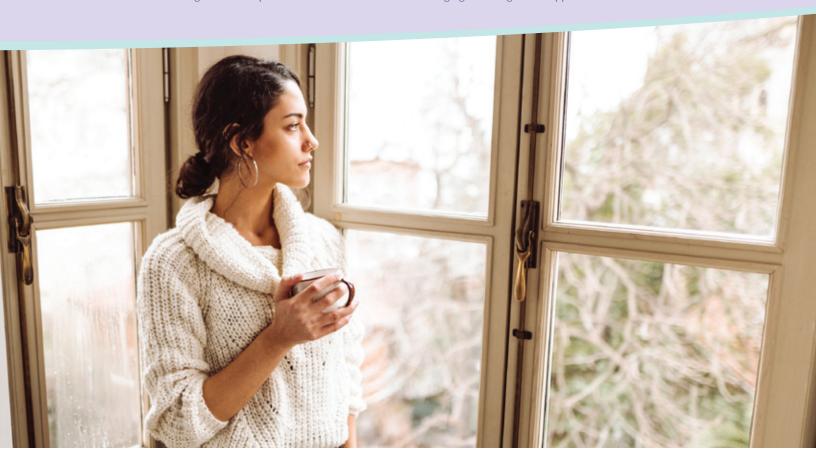
Trauma refers to experiences that cause intense physical and psychological stress reactions. It can refer to "a single event, multiple events, or a set of circumstances that is experienced by an individual as physically and emotionally harmful or threatening and that has lasting adverse effects on the individual's physical, social, emotional or spiritual wellbeing."

Exposure to traumatic events may trigger changes in the immune system. It may also increase the risk of health problems, including diabetes.

### **Checkpoint**

Read the statements below and select the best answer from the choices below.

- 1. Trauma and adverse life events can have a lifelong impact on an individual.
  - A. True
  - **B.** False
- **2.** Trauma-Informed Care identifies traumatic events that an individual has experienced and views them not as past events, but as experiences that form the core of the person's identity.
  - A. True
  - B. False
- **3.** Resilience is:
  - A. The ability a person has to select their own preferences
  - **B.** The action of working with someone to produce or create something
  - C. The capacity to recover quickly from difficulties
  - **D.** All of the above
- **4.** The five principles of Trauma Informed Care are:
  - A. Safety, Management, Communication, Resilience, Choice
  - B. Safety, Trustworthiness, Choice, Collaboration, Empowerment
  - **C.** Empowerment, Choice, Collaboration, Resilience, Trustworthiness
  - **D.** All of the above



# **Module 4: Behaviors**

## **Lesson 9: Approaching Behaviors**

The caregiver will demonstrate a sequence of steps to approach challenging behaviors to recognize changes in behavior, mood and cognition.

# **Lesson 9 Approaching Behaviors**

### **Objective:**

The caregiver will demonstrate a sequence of steps to approach challenging behaviors to recognize changes in behavior, mood and cognition.

### **Overview**

Diabetes can be challenging in itself. You have learned earlier in this book about the effects of diabetes on the body and the numerous ways to manage the effects. You have learned the impact that past trauma may have on an individual's present well-being and triggers that may prompt negative reactions when resilience and healthy coping mechanisms are lacking.

Remain empathetic, dependable, patient, strong, flexible and creative when interacting and approaching individuals and their behaviors.

This lesson gives a general method for approaching behaviors. As you work through each section, think about situations you have been in and how you might apply this three-step approach in future situations.

Think about a time that you interacted with someone who was behaving in a challenging way. Consider how each person involved reacted or responded to the behaviors. What went well? What could have been done better?



# Diabetes Management and Behaviors

Managing diabetes can be challenging. People use behaviors to communicate a personal need, feelings and emotions. There might be many things going on with the person that may contribute to the behavior. In order to decide how to respond to the behavior you need to take a step back and figure out what the person's behavior may be telling you. There is no "one size fits all" solution when dealing with behaviors. Different people have different needs.

Challenging behaviors may be influenced by:

- The burden or overwhelm of the disease and disease management
- · Perceived impact of the disease on family
- Financial burdens of medical bills, medications, groceries and other costs
- Sleep disturbances
- Stress
- Blood sugar imbalance

These influencers may cause depression, anger, agitation or feeling ashamed that it is their fault.

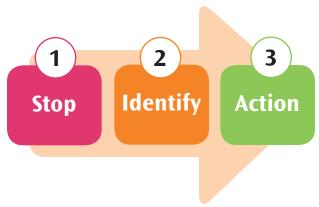
Remember that being supportive of the individual is key. Your goal is to provide the highest quality of care for the individual and try not to take behaviors personally. The individual may require different treatment, support or tools to manage the diabetes. When in doubt, talk with the individual, your manager, the care provider or medical team to assess what is right for the person.

Some individuals may find support groups to be beneficial so that they feel more connected with others who understand their challenges.

# **Strategies for Approaching Challenging Behaviors**

While there are a number of strategies to work with behaviors, your primary role is to remain and appear calm and supportive and do not take the behaviors personally. Remember that the individual who has diabetes does not necessarily behave in a way to get attention or to be mean. They are expressing a need. You must learn the individual's history, habits, current needs and abilities. There is no right/wrong view of challenging behaviors.

To approach behaviors: Stop, identify and take action.



### Step 1: Stop

When you are faced with an unexpected behavior, take a moment to stop yourself and take a pause from the situation. Make sure you are not reacting. Calm yourself and focus. Most challenging behaviors have a cause or a trigger. There is a reason for the behavior. Challenging behavior is likely a reaction to something that set the behavior in motion. Having a reaction means that the individual might be unconsciously, emotionally and impulsively behaving without any thought to a situation or event. It is your job to respond. Responding is taking thoughtful action.

Responding rather than reacting to a challenging situation takes self-control and discipline. The best way to respond and not react is to stop before taking action unless someone is in immediate danger.

- Stop or pause even if only for a few seconds
- Calm yourself

#### **Calming techniques**

If you find yourself reacting instead of responding, there are many ways to get calm and focused. Find something that works for you.

Some ideas may include:

- Take a few deep breaths.
- · Count to ten.
- Detach yourself from the emotions of what is happening around you.
- Separate the behavior from the person.
- · Recognize it is not about you.
- Repeat a positive phrase or affirmation to yourself such as "I am calm and relaxed in every situation," "I remain calm and positive in difficult situations," "I remain calm and in control under stress."
- Get a clear picture in your mind of armor surrounding and protecting you from harm.
- Imagine a scene, person or experience that gives you a feeling of calm.

If you are still unable to calm and focus yourself, give yourself a brief time-out (if possible in your situation) or ask for help. It is better to walk away for a few minutes and collect yourself than to risk reacting and making the situation worse.

Discuss how you would use step one to approach the following behaviors:
Jeffery pushes you away.
Paula is screaming and cursing.
Harry just took his pants off in the living room.
Lynda is crying.

### **Step 2: Identify**

After you complete step one, it is time to figure out what is happening. In step two, identify what caused or triggered the behavior. You should know the individual's routines, preferences and daily rhythms related to care and life history. When you see a change that concerns you, remain emotionally available to the individual.

- · Show genuine interest and concern
- Realize that your own personal feelings of stress, personal worries and time pressures can add to any emotional tension the individual is experiencing
- Listen to what the person is communicating through body language, words and the emotions behind their actions

The individual might be expressing a need or desire or there might be a trigger that is physical, environmental and/or emotional. The individual may simply be frustrated that they cannot do what they want it to.

#### Expressing a need or desire

There are many reasons an individual may not be able to communicate needs and wants with words.

Sometimes what you may see as a challenging behavior may be the only way the individual can tell you that they need or want something.

#### Physical, environmental and emotional triggers

There are common triggers to look for that may be causing a behavior.

#### **Physical triggers**

- Symptoms of the disease(s) or condition(s)
- Infection, such as Urinary Tract Infection (UTI)
- Pain
- Medication side effects or drug interactions
- Dehydration
- · Hunger or thirst
- Fatigue
- Recent injury
- Incontinence
- Constipation
- Unmet physical care needs such a needing to go to the bathroom
- · Uncomfortable clothing



#### **Environmental**

- · Too much noise or people
- Intrusion into the persons space
- Temperature (too hot or too cold)
- Something unfamiliar being added in the environment
- Something familiar being removed or moved
- Lack of privacy
- · New environment or people
- · Too bright or too dark
- Smells
- · Full moon or sun setting
- · Shift change

#### **Emotional**

- Change in routine (especially if the individual feels no control over the change)
- · Recent big changes or losses
- Difficulty with family, friends, other care members
- Need to regain a sense of control
- Depression
- Boredom
- Past or current events, including holidays
- Anxiety
- Fear
- Loneliness
- Lack of intimacy
- Emotional state of other people

The perspective of the individual you are caring for is what is important when looking for possible triggers. What has triggered the individual's behavior can be very different from what would trigger you.

#### Other things to look for:

- What happened just before the behavior started?
- Were there other people involved when the behavior occurred? Where did it occur?
- What is happening in the person's living space?
- Is this a new behavior?
- Are there certain actions that make it worse?
- Is the individual trying to communicate a need or desire?
- Are there any patterns you can see? For example, is there a certain time of day, events such as shift changes, a particular caregiver or visitor, substances like drugs, alcohol, sugar or caffeine or after taking a certain medication that sets it off?

Discuss how you would use step two to approach the following behaviors:

Just before Jeffery pushed you, you were in his room and helping him remove his socks.

Paula is screaming and cursing. You look around the living room and you see Harry with his pants off. The TV is off. The window is open.

Harry just took his pants off in the living room. You also noticed that he has removed his prosthetic leg.

Lynda is crying. You have noticed Lynda has been crying more recently.

### **Step 3: Take Action**

Because there is no "one size fits all" formula to handle challenging behaviors, what works in one situation may not work in another and may not work in the same situation. What works with one individual may have the opposite result with another. The best way to deal with challenging behaviors is to adapt as you go to each unique individual and situation. This means that you must be:

- Constantly aware of signals the individual is giving off.
- Ready to adapt, walk away, soothe, distract or respectfully steer the individual away from what triggered the behavior.
- Willing to do something different if what you tried does not seem to be working.

#### Minimize or eliminate the trigger

If you have an idea what is causing the behavior, try to stop or minimize the trigger. If meeting an individual's need or request can minimize or eliminate the behavior, ask yourself the following questions:

- · Does it hurt anyone to do it?
- Are you bothered because it:
  - Makes you change or adjust YOUR schedule?
  - Might look odd or unusual to others?
- Requires you to "think outside the box?"
- Would be easier to do it the "regular" way or at a less busy or unusual time?
- Is the individual experiencing pain?

#### **Adapt**

Look for ways to adapt to the individual and their routine. This can include:

- Changing when or how the individual receives care.
- Breaking tasks down into smaller steps.
- Taking frequent breaks to allow the individual more time to do each step.
- Not doing certain tasks as frequently or doing them at a different time.
- Doing more prompting or cuing.
- Encouraging independence and choice in even the smallest ways.
- · Using assistive devices fully.



#### **Common Pitfalls**

Common pitfalls in taking action on challenging behaviors might include:

- · Correcting behavior.
- Ignoring the behavior.
- Arguing with the person.
- Attempting to use reasoning to change the behavior.

Be aware and observant of subtle details. The answer for successfully navigating through challenging behaviors is often in the subtle details of who the individual is as a person.

- How do you know when the individual likes or does not like something?
- What types of things, situations, or people seem to make the individual frustrated, anxious or nervous, angry, etc?
- What pace of activity is comfortable for that individual?
- How do you know when it is too fast or too slow?
- How does the individual communicate (both verbally and with body language) what he/she wants?
- Is there anything you can learn about the individual's general personality that gives you an overall sense of the best way to work with them?
- Is there anything unique to the individual's culture that could be contributing to the challenging behavior?

When you get to know some of these more subtle things about an individual, you can watch for early warning signs of possible problems. Take action immediately to help the individual feel more calm and reassured (reduce or minimize the trigger, give space, calm, distract, reassure, etc.)

#### Give space

Ask yourself if giving the individual some space would be best. If it is safe, come back in five or ten minutes. This may give the individual time to calm down. Some quiet time may be all it takes to resolve the situation. Giving space can also mean staying with the individual and respecting his or her need for personal space. How much space does the individual appear to need around their physical body? Is the individual hypersensitive to touch? Movement? Claustrophobic? Is there a particular way you can approach the individual that seems less unsettling to them? Knowing the answers to these questions can help guide you in how to approach the individual any time, but especially when the individual is highly reactive.

#### Tips when approaching

Pay special attention how you approach individuals with diabetes. A sense that you are invading personal space is a common trigger of challenging behavior. Remember to:

- Knock. Ask permission to enter a personal space.
- · Smile genuinely.
- Try to get the person's attention before you talk.
- Move slowly. Avoid sudden movements.
- Identify yourself and why you are there.
- Address the individual by the preferred name.
- Spend a few minutes talking with the individual before providing care. This gives you time to see how the individual is doing and gauge if it is safe to proceed with care.
- Explain what you are doing and confirm that they heard you accurately.

#### Soothe and comfort

- Slow down your own movements and energy.
- Try not to show any anxiety or other intense emotions.
   They will likely increase the reactions from the individual.
- Validate the person's feelings.
- Speak slowly, softly with a low pitch and in a reassuring tone. Make sure the individual can hear you if he or she has trouble hearing.
- Offer choices you know comfort that individual (warm blanket, rocking chair, quiet music, a cup of tea, turning on a favorite show, a favorite object, holding pet).

- Reduce distractions or loud background noise as much as possible. Examples might be turning down the TV, asking others in the room to step out, or turning down the lights. Ask the individual's permission before doing any of these things.
- Play relaxation or anti-anxiety music or meditations.
- If touch might be comforting, offer physical comfort such as lightly stroking the individual's hand, giving a hug or a back rub. The appropriateness of comforting touch depends on the individual and policies where you work. If offering comforting touch is allowed, ask the individual's permission first. Make sure you know preferences when it comes to touch and back off immediately if it further upsets the person.

As a general rule, remember that your body language is your best communication tool. This means that it is critical that:

- Your posture, facial expressions and stance are relaxed and open.
- Your tone is respectful and calm.
- · You move slowly.
- You stop what you are doing and focus on the individual.
- Your body language matches the words you say to the individual.

#### Reassure

- Listen! Let the individual talk about their feelings. Do not ask a lot of questions at first. Let the individual get some of the excess emotions out. Listening helps make sure the individual knows that he/she has been "heard" by you. Listen to both words and body language.
- Be understanding and sympathetic. The individual will be more likely to respond favorably if you sound sympathetic rather than insincere, annoyed, frustrated or angry.
- Maintain clear boundaries if you are treated with disrespect or threatened.
- This is not the time to have a talk about the behavior.
   Wait until later when the situation is calmer to work through any boundary issues or concerns.

#### Distract or redirect

- Distract the individual by offering choices such as a calming or favorite activity such as a walk, snack or beverage.
- Change the conversation to something positive that may redirect the person.
- Encourage the person to take several deep breaths.
- Reinforce positive behaviors.

#### **Encourage**

- Listen.
- Use praise liberally while remaining mindful that the individual is an adult. Be careful that the praise does not become child-like.
- Reinforce positive behavior no matter how small.
- Encourage keeping happy reminders, such as family pictures or treasured keepsakes in plain view.
- Encourage the individuals to engage in healthy behaviors in diet, exercise and socializing with others.

### Protect and support others being impacted by the behavior

It can be upsetting for others to see or be part of the challenging behavior. Remember to stay aware of others in the area. Take action to support and protect others if they are impacted.

#### Get help

Know your limits. If you need help, get it. Especially when medical or other emergency help is needed. Know what the policy is, or know what your agency/employer policy is on involving other individuals such as medical personnel, other team members, family, friends or guardians.

Speak up immediately if you ever feel you are at your own breaking point or limit when dealing with an individual who is exhibiting challenging behavior.

#### **Self-care**

As a caregiver, you need to replenish your emotional reserves after handling stressful behaviors. This requires good self-care. Take time to manage your feelings.

#### Prevent or minimize challenging behaviors

Once the heat of the moment has passed, you may have more time to reflect on what triggered the challenging behavior. This information helps you take steps to avoid these situations from happening again. With more time to reflect, you may see additional patterns or concerns.

#### **Document and report**

You may have important information to share with other team members. Others on your team need to understand and learn from what you observed, what actions you took and what did and did not work. There will be policies and procedures for documenting and reporting challenging situations that you must follow. Objectively writing down what happened and what actions you took gives everyone a record. This record will help make sure you do not forget even small details, that when reviewed again, might reveal important information.

Discuss how you would use step three to approach the following behaviors:

You stopped and identified that Jeffery pushed you when you were in his room and helping him remove his socks. You ask Jeffery why he pushed you. He responds that his foot hurts. How would you take action?

You identify that Paula is angry at Harry for taking off his pants and that he also removed his prosthetic leg. How would you take action?

You identified that Harry was uncomfortable in his pants because his prosthetic leg was bothering him. He said his pants were rubbing. How would you take action?

You identified that Lynda is crying because it is her birthday coming up soon and traditionally she has always had a big party and enjoyed eating cake. She is on a strict diet and she doesn't see how she can celebrate now that she has diabetes. How would you take action?

### **De-escalation**

In any situation, the only thing you have complete control over is yourself. Caregiving is a profession that provides care for individuals who will experience crisis. Individuals will respond to stress in different ways although a predictable pattern recognized in five phases: triggering event, escalation, crisis, recovery and post-crisis depression. This is known as the assault cycle. In the escalation phase, the individual will experience increasing levels of agitation.

De-escalation techniques are used during this phase to try to help the individual return to baseline (their normal levels of behavior). Successful de-escalation begins with you and your attitude, beliefs and actions.

### **Strategies**

#### **Preventing Crisis:**

- Monitor body posture, tone of voice, content of speech and use of gestures for signs of increasing agitation.
- Increase rest time for the individual, especially during times of day when there is a pattern of increased agitation.
- Keep the environment simple.
- Keep instructions simple.
- Give productive and positive feedback.
- Set goals with the individual that gives the individual an opportunity for small successes in their progress.
- Stav calm.
- Redirect the individual to a different activity, space or topic when it appears that they are showing signs of increased agitation.
- Vary type of activities.

#### Interventions:

- Active listening incorporates a variety of listening skills such as paraphrasing, clarifying and perception checking.
- Orientation involves awareness to time, place and person.
- Setting limits can be useful for individuals who are trying to intimidate by threatening behavior.
- Redirecting the individual to another task or activity may interrupt the escalation phase.
- Withdrawal of attention may be effective with manipulative types of behavior.
- Give the individual space, allow time to calm down.
- Know when not to push the individual.

### **Lesson Summary**

- **Step 1: Stop.** When you are faced with an unexpected behavior, take a moment to stop yourself and take a pause from the situation. Make sure you are not reacting.
- Step 2: Identify. After you complete step one, it is time to figure out what is happening. In step two, identify what caused or triggered the behavior. You should know the individual's routines, preferences and daily rhythms related to care and life history. When you see a change that concerns you, remain emotionally available to the individual.
- Step 3: Take Action. Because there is no "one size fits all" formula to handle challenging behaviors, what works in one situation may not work in another and may not work in the same situation. What works

with one individual may have the opposite result with another. The best way to deal with challenging behaviors is to adapt as you go to each unique individual and situation.

- Validate the person's feelings.
- Offer choices you know comfort that individual (warm blanket, rocking chair, quiet music, a cup of tea, turning on a favorite show, a favorite object, holding pet). Play relaxation or anti-anxiety music or meditations.
- Listen! Let the individual talk about their feelings.
   Do not ask a lot of questions at first. Let the individual get some of the excess emotions out.
   Listening helps make sure the individual knows that he/she has been "heard" by you. Listen to both words and body language.

### **Checkpoint**

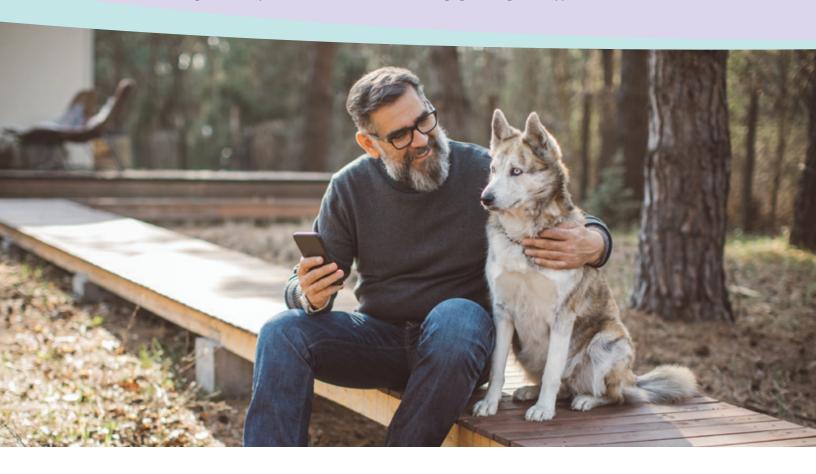
Instructions: Read the scenarios below. Using the three-step strategy for approaching behaviors, select the answer that is most appropriate for each step.

Charles Miller is at the table looking at the salad in front of him and gets angry. He pushes the plate away from him and folds his arms over his chest. He yells "I want a steak and a big pile of potatoes"! How do you approach using step two: *identify.* 

- **A.** Find a solution that best supports Charles.
- **B.** Find out what caused Charles to be angry.
- **C.** Take a few breaths and calm yourself before approaching Charles.
- **D.** All of the above

Michelle Williams is often found rummaging through cupboards, drawers and closets, searching for food. How do you approach using step three: *take action*.

- **A.** Find a solution that best supports Michelle.
- **B.** Find out what is causing Michelle to rummage searching for food.
- **C.** Take a few breaths and calm yourself before approaching Michelle.
- **D.** All of the above



# **Module 5: Self Care**

### **Lesson 10: Caregiver Self Care**

The caregiver will recognize the importance of caregiver wellness and identify strategies to prevent secondary trauma and burnout.

### **Lesson 11: Diabetes Self Care**

The caregiver will communicate the importance of self-care for the individual with diabetes.

# **Lesson 10 Caregiver Self Care**

### **Objective:**

The caregiver will recognize the importance of caregiver wellness and identify strategies to prevent secondary trauma and burnout.

### **Overview**

Caregiving is a rewarding yet physically and emotionally challenging profession. It is critical that you take care of yourself, so you are at your best for others.

Most of us know that self-care is important and yet we still put ourselves last in a long line of people we care for. Make self-care a priority. It will help you maintain a better sense of wellness. It will also help prevent secondary trauma and burnout.

What was the last thing you did for your own self-care?

# Caregiver Wellness and Self-care

Self-care is any activity that we do deliberately to take care of our mental, emotional, and physical health. Some aspects of self-care might include care in the following areas:

- Work
- Body
- Mind
- Emotions
- Spiritual
- Relationships

Find ways to nurture yourself throughout your workday and during your commute. Take regular breaks, for meals or just to step away. If possible, take breaks away from your workspace. Take breaks away from your work responsibilities.



Find ways to change pace occasionally during the day. Stand and stretch occasionally if you sit at a desk. Listen to music, an audio book, or radio program on your commute to work. Take a brief walk or breathe deeply and consciously for a minute.

Take time away from your job to rejuvenate. Strive to maintain a regular work schedule and avoid working overtime on a routine basis.

Decide how much (if at all) you need to be available off the job. Do you need to be available overnight? Work with your supervisor to talk about what expectations are when you are ill or during vacations.

Clear expectations are important. Is there an expectation of using a smart phone or laptop to access work email remotely? Do not confuse professional responsiveness with being accessible to your colleagues and clients 24 hours a day, seven days a week.

Devote time off the job to activities that nurture you. Spending time engaged in nurturing activities and rest can re-energize you to return to work. Some activity ideas:

- Spend time with family or friends
- Read
- · Watch a movie
- Sing
- Journal
- Meditate
- Exercise
- Rest

Be attuned to the ways you absorb work stresses. Take steps to manage that stress.

Many caregivers find themselves "taking work home" on an emotional level. This includes caregivers who have excellent boundaries, coworker support and a manageable workload. This can result in persistent worry about care situations while away from the job. Work-related stress can also result in hyper-vigilance within a caregiver's personal life. Despite the absence of symptoms, there may be a fear of illness from constant exposure to illness.

Write about your feelings or talk with someone you trust. It can help you process the impact of work on your life. Writing can help you maintain clear internal boundaries between work life and personal life.

What do you currently do well for your own self-care?

What could you add to your routine that will benefit your personal wellness?

Think about the six areas of self-care and try to identify a self-care strategy for that category that you are currently doing well. Areas that have room for improvement, identify a new strategy or how you can improve what you are currently doing.

Work

**Body** 

Mind

**Emotions** 

Spiritual

Relationships

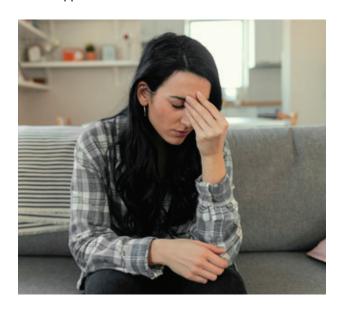
# Secondary Trauma and Burnout

Secondary trauma is also known as compassion fatigue or burnout.) It is trauma-related stress reactions and symptoms. It is from exposure to another person's traumatic experiences. This is different from exposure directly to a traumatic event. Secondary trauma can occur among caregivers who care for people who have experienced trauma.

Symptoms of secondary trauma may include:

- Intrusive thoughts
- · Chronic fatigue
- Sadness
- Anger
- · Poor concentration
- · Second guessing
- Detachment
- · Emotional exhaustion
- Fearfulness
- Shame
- · Physical illness
- Absenteeism

Prevent secondary trauma by practicing personal wellness techniques. This includes having a diverse social support network.



# Strategies to Cope with Caregiver Burnout

Over time, you may feel overwhelmed, exhausted, frustrated, resentful and guilty. Do not ignore the signs of burnout in yourself or other caregivers.

#### Remember:

- Caregivers often strive to meet the needs of the person they are caring for at the expense of their own needs.
- Caregivers often experience higher stress, illness, and burnout than non-caregivers.

The reality is that at one point or another you may face caregiver burnout. There are ways to reduce the burnout we may incur while caregiving. No matter how overwhelmed you feel, it is important that you make and take time for yourself.

Providing care may carry a steep emotional toll. One study found that as many as one in three caregivers rate their stress level as high, and half say they have less time to spend with family and friends.

However, when you are caring for others it is critical that you first take care of yourself. By not doing so, you put yourself at risk of exhaustion, health problems and even total burnout.

These tips will help keep your stress in check:

- Put your physical needs first. Eat nutritious meals. Do not give in to stress-driven urges for sweets and junk food or overindulge in alcohol. Get enough sleep; if you have trouble sleeping at night, try napping during the day. Schedule regular medical checkups. Find time to exercise. Talk to a medical professional if you experience symptoms of depression, extreme sadness, trouble concentrating, apathy, hopelessness, and/or thoughts about death.
- Connect with friends. Isolation increases stress.
   Getting together regularly with friends and relatives can keep negative emotions at bay.
- Ask for help. Make a list of things you have to do and recruit others to help.
- Take time. Take regular breaks and meal breaks.
- Deal with your feelings. Seek support from co-workers who are in similar situations. Make an appointment with a professional counselor or join a caregiver support group if one is available in your area.
- Talk about it. Do not keep your emotions inside

   develop a support system. Friends, relatives
   or support groups can be a tremendous benefit
   to you and your well-being. Due to the increase



in caregivers and the increase of those in need of care, there are now caregiver support groups in most communities. Contact your local Department of Health and Social Services for more information.

- Be proactive. Plan ahead, although it may be difficult to do so, it is important to be proactive rather than reactive.
- Find time to relax. Doing something you enjoy such as reading, walking or listening to music can recharge you. Some caregivers meditate or use relaxation techniques. This includes deep breathing or visualizing a positive place. If you are religious, you may find that prayer can be a powerful tool.
- Set your own goals. You should decide what you can and cannot do. Be realistic. For example, it may be impossible for you to complete every task on schedule, but it is realistic to set goals and attempt to meet those goals.
- Get organized. Simple tools like calendars and to-do lists can help you prioritize work and home responsibilities to help you manage your time.
- Just say no. Accept the fact that you cannot do
   everything. Resist the urge to take on more activities or
   shifts that you cannot handle. If someone asks you to do
   something that will stretch you too thin, say no and do
   not feel guilty.
- Stay positive. Do your best to avoid negativity. Instead of dwelling on what you cannot do, pat yourself on the back for how much you are doing and focus on the rewards of being a caregiver.
- Evaluate the situation. Ask yourself realistically how much time you can designate to specific care tasks.
- Understand that it is acceptable to have mixed feelings. Your emotions should be mixed. For example, allow yourself to feel angry that the care recipient is not appreciating the care you are providing. At the same time, you may feel guilty that you are angry when your client is physically or mentally ill.
- Understand that you cannot create or cure illness. As much as we all would like to be capable of controlling pain, it is beyond our control. As caregivers, we can only make it more comfortable.

### **Lesson Summary**

- Self-care is any activity that we do deliberately to take care of our mental, emotional and physical health.
- Find balance between self-care around your work, body, mind, emotions, spiritual and relationships.
- Devote time off the job to activities that nurture you.
   Spending time engaged in nurturing activities and rest can re-energize you to return to work.
- Keep stress in check by talking about your emotions, develop a support system, set goals, say no when you need to and understand that you cannot create or cure illness.

### **Checkpoint**

Read the pairs of statements below. Identify if statement A or statement B in each pair is the better option to prevent secondary trauma and burnout.

Α	В
<b>1.</b> Put your needs first.	<b>1.</b> Put others needs first.
2. Isolate yourself.	<b>2.</b> Connect with friends.
<b>3.</b> Do everything yourself.	3. Ask for help.
<b>4.</b> Take regular breaks.	<b>4.</b> Work extra shifts.
<b>5.</b> Deal with your feelings.	<b>5.</b> Keep your emotions inside.
<b>6.</b> Find time to relax.	<b>6.</b> Over schedule yourself.
7. Find more ways to please others.	7. Just say no.
<b>8.</b> Complete every task on schedule.	8. Set goals.

# **Lesson 11 Diabetes Self Care**

### **Objective:**

The caregiver will communicate the importance of selfcare for the individual with diabetes.

### **Overview**

Self-care for a person with diabetes may look a bit different from self-care for someone without diabetes. Self-care is always individualized regardless of diagnosis. There are the six areas of self-care to be mindful of. A person who has diabetes is also managing the diabetes, the effects of the diabetes and practicing other essential self-care behaviors.

### **Individualized Self-care**

In lesson 4, you learned about person-centered approach to the care you provide and in lesson 10, you learned about your own self-care. Your self-care needs are unique to you because each person is unique. This uniqueness comes from a lifetime of experiences influenced by many things. Some of those experiences that influence are:

- · Cultural background
- Religious upbringing and beliefs
- Gender and gender identity
- Sexual orientation
- Marital status
- · Economic status
- Social groups
- Disability
- · How a person sees the world
- What he/she believes in
- Values
- What he/she considers acceptable ways to look and act and
- What he/she considers "normal"

It is good to ask the person you are providing care for — what does self-care look like to you? What does self-care mean to you?

The person you are providing care for is more than the disease. They should be able to help guide their self-care needs.

This may look different than it would for someone without diabetes. For example, a person may not be able to walk because of the disease. They may also have more challenges managing the diabetes. This may affect self-care routines.

Roger is a gardening enthusiast. He loves reading and woodworking. Roger has Type 2 diabetes. He is often extremely tired and has numbness in his feet and hands.

Discuss ways Roger can add self-care into his routine while considering managing his diabetes.

# **Seven Essential Self-care Behaviors**

Seven essential self-care behaviors have good outcomes in people with diabetes.

If the person you care for participates in these behaviors, it may lead to improved quality of life. It may lead to improved glycemic control and reducing diabetes complications.

- 1. Healthy eating
- 2. Being physically active
- 3. Monitoring blood sugar
- 4. Taking medications
- 5. Good problem-solving skills
- 6. Healthy coping skills
- 7. Risk-reduction behaviors



### **Healthy Eating**

People with diabetes may have questions about what they can and cannot eat. They may wonder if they can ever eat their favorite foods again. They may wonder what happens when eating out or at a friend's house.

Self-care and healthy eating means understanding how food choices in these situations affect the blood sugar.

How might you support an individual who wants to spend time having a meal with friends or family as a form of self-care?

### **Physical Activity**

Being active can have many health benefits. Benefits may include

- · Lowering cholesterol
- · Improving blood pressure
- · Lowering stress and anxiety
- · Improving mood

Physical activity can also help manage blood sugar levels.



There are many ways that physical activity can be added to a day. It should take into consideration the interests of the person.

- Dance
- Yoga
- Ride a bike
- Swim
- Walk
- Hike
- Jog
- Stretch

List more self-care routines that might promote healthy physical activity.



### **Monitoring Blood Sugar**

Checking blood sugar throughout the day can help a person know how well the diabetes management is working.

This helps a person know if they need to adjust their food and activity.

How can you provide support to check blood sugar? Consider your policies and procedures.



### **Taking Medications**

There are many types of medications to manage diabetes. Medications affect different people in different ways. Medications are taken according to the instructions for each medication.

### **Good Problem-Solving Skills**

People with diabetes may encounter problems with managing the disease. Being prepared with good problem-solving skills to prepare for unexpected challenges is a good idea.

Ask questions such as what do you do when you have a low blood sugar? Do you know what caused the low blood sugar? How can you help reduce the risk of it happening in the future?

Support the person you care to learn, recognize and react to high and low blood sugar levels. Also, learning how to manage diabetes on days when they are sick. It is important to consider in advance of when it becomes a problem.

### **Healthy Coping Skills**

Diabetes can affect physical and emotional health. Living with diabetes every day can make a person feel discouraged, stressed and even depressed.

It is natural to experience highs and lows and having an awareness of these mixed feelings is important. Friends, family and caregivers can help provide support. Attending a diabetes support group and seeing a therapist can also provide emotional support.

### **Stress management**

Managing stress is important because stress can raise blood sugar levels. Identifying the causes of stress for a person and finding ways to manage or reduce the stress can help improve well-being.

- · Take time to relax
- · Make time for reflection
- · Commit to regular exercise
- Spend time in nature
- Meditate

### **Avoiding burnout**

Living with a chronic disease can be challenging. Having to think about diabetes every day can leave a person feeling burned out. Some of the same skills used to manage stress can also help with managing burn out.

- Schedule time for self-care.
- · Take short breaks if time is limited.
- · Learn to say no.
- Spend more time with positive people.
- Spend less time watching TV or looking at smartphones.
- · Create new habits.

### **Depression**

Every person has days where they feel sad, discouraged or unmotivated. When those feelings last for days and weeks, a person may be having symptoms of depression.

- Schedule regular visits with a therapist or counselor.
- Take medications if prescribed.
- · Get enough sleep.
- · Make time for physical activity.
- · Stay connected with others.
- Create a healthy environment.

### **Risk-reduction Behaviors**

Having diabetes puts a person at risk for developing other health problems. These were outlined in lesson 1. If a person understands the risk, they can take steps to lower the chances of diabetes-related complications.

Reducing risks can include:

- · Do not smoke.
- Schedule regular medical checkups.
- See an eye doctor at least once a year for dilated eye exam.
- · Keep feet dry and clean
- · Lower cholesterol
- · Manage diabetes

### **Accountability**

Accountability is the obligation or willingness to accept responsibility for ones actions. The individual(s) you care for are important and self-care is essential for all. Some people need more support and accountability to follow through with self-care activities.

### Plan it

Provide support by encouraging or helping to plan selfcare activities. Things that get scheduled have a better chance of getting done.

### **Share the plan**

Ask that the person share their self-care plan with you or someone close to them. By sharing the plan, it may be easier to stay on track.

#### **Check in**

Check in on the self-care activities. Have conversations about what is going well or what could go better next time.

### **Encourage**

Encourage good self-care and choices. Be respectful of the choices made and do not judge or shame the person about their choices.



### **Lesson Summary**

- The person you are providing care for is more than the disease. They should be able to help guide their selfcare needs.
- Seven essential self-care behaviors have good outcomes in people with diabetes. Healthy eating, being physically active, monitoring blood sugar, taking medications, good problem-solving skills, healthy coping skills, risk-reduction behaviors.
- Healthy coping skills include managing stress and avoiding burnout and depression.

### **Checkpoint**

Read the statements below and select the best answer from the choices provided.

- **1.** There are seven essential self-care behaviors in people with diabetes which predict good outcomes. Three of these behaviors are healthy eating, being physically active, healthy coping skills.
  - A. True
- **B.** False
- **2.** Self-care should be individualized or person-centered.
  - A. True
- B. False

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# **Notes**

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