Instructor Guide 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, longterm care ombuds and advocacy group representatives.

Curriculum Development

Angela Regensburg, MAED

Program Manager, Training Unit Specialty Curriculum & Quality Assurance Aging and Long-Term Support Administration Department of Social and Health Services

Contributing Subject Matter Experts

Alexandro Pow Sang

Diabetes Consultant Heart Disease, Stroke and Diabetes Prevention Prevention and Community Health Washington State Department of Health

Audra Williams

Head of Operations, Home Care Assistance of Bellevue LeadingAge Washington

Cheryl Farmer, MD

Program Manager – Heart Disease, Stroke, and Diabetes Prevention Office of Healthy and Safe Communities Division of Prevention & Community Health Washington State Department of Health

Elizabeth Paul

In it Together RN Clinical Director, CEO Clark County nurse delegator and assessor AFHC

Glenna Wicket Training Program Coordinator Brookdale Senior Living WA WHCA Karen Cordero Director of Education & Support Adult Family Home Council (AFHC)

Marissa Floyd

Cross program consultant Healthy and safe communities Department of Health

Nila Williamson

Clinical Nutrition Consultant Children/Youth with Special Health Care Needs Program (CYSHCN) Prevention and Community Health Washington State Department of Health

Therese Allen

Clinical Educator, Wesley Des Moines Health Center LeadingAge Washington

Vicki McNealley

Director of Assisted Living Washington Health Care Association (WHCA)

Curriculum Review

Samuel Cooke Training Curriculum Developer, HCS Department of Social and Health Services

Molly McIsaac HCS Program Manager, HCS Department of Social and Health Services

Arielle Finney APS Policy & Legislative Program Manager, APS Department of Social and Health Services

Christine Kubiak Reg QA Nurse Program Training Manager, RCS Department of Social and Health Services

Pilot Testing and Roll Out

Sarah Lane S&H Training Center, Inc President, Lead

Elizabeth Paul In it Together RN Clinical Director, CEO Clark County nurse delegator and assessor AFHC

Glenna Wicket Training Program Coordinator Brookdale Senior Living WA WHCA **Cory Cisneros**

Regulatory QA Program Training Manager - ALF and ESF, RCS Department of Social and Health Services

Marci Caird Regulatory QA Program Training Manager – AFH, RCS Department of Social and Health Services

Julie Peters Quality Assurance Training Program Manager, HCS Department of Social and Health Services

Christina Garcia Health Homes, Molina Health Care

Table of Contents

Introduction to This Guide	5
Overview Schedule	7
Preparation Checklist	8
Recommended Materials and Technology	
Checklist	9
Online Classroom	10
Learner Expectations	10
Registration	10
Before Class	10
Participation	10
Video	10
Microphone	10
Testing	10
Evaluation	
Navigating the Instructors Guide	
Course Introduction	12
Materials	12
Agenda	
Module 1: Introduction to Diabetes	14
Lesson 1: Understanding Diabetes	15
Lesson 1: Understanding Diabetes	15 15
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state	15 15 15
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities	15 15 15 15
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information	15 15 15 15 15
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes?	15 15 15 15 16
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes?	15 15 15 15 16 16
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes	15 15 15 15 16 16 17
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes	15 15 15 15 16 16 17 17
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes	15 15 15 15 16 16 17 17 17
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes	15 15 15 15 15 16 16 17 17 17 17
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes Gestational diabetes	15 15 15 15 16 16 16 17 17 17 17 19 19
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes Gestational diabetes Other types of diabetes	15 15 15 15 15 16 16 17 17 17 19 19 19
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Gestational diabetes Gestational diabetes Other types of diabetes Hyperglycemia	15 15 15 15 16 16 16 17 17 17 17 19 19 19 19
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes Gestational diabetes Other types of diabetes Hyperglycemia Early signs and symptoms	15 15 15 15 16 16 16 17 17 17 17 19 19 19 19
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes Gestational diabetes Other types of diabetes Hyperglycemia Early signs and symptoms Later signs and symptoms	15 15 15 15 16 16 16 17 17 17 17 19 19 19 19
Lesson 1: Understanding Diabetes Overview Snapshot of Diabetes in Washington state Health disparities More information What Is Diabetes? What Is Prediabetes? Types of Diabetes Type 1 diabetes Type 2 diabetes Gestational diabetes Gestational diabetes Other types of diabetes Hyperglycemia Early signs and symptoms	15 15 15 15 16 16 16 17 17 17 17 19 19 19 19 19 19 19

	and the second	~~	
Hy	ypoglycemia		
	Early warning signs include:		
	Nighttime signs and symptoms		
	Severe signs and symptoms		
	To prevent diabetic hypoglycemia		
	What causes the blood sugar to go up and down .		
Cr	nolesterol		
	Low-density lipoprotein (LDL) cholesterol		
	High-density lipoprotein (HDL) cholesterol		
Et	fects of Diabetes on the Body		
	Cataracts, retinopathy and glaucoma		
	Damaged blood vessels		
	Dry mouth		
	Dry, cracked skin		
	Excess hunger		
	Fatigue		
	Foot problems		
	Gastroparesis	26	
	Heart disease		
	High blood pressure	27	
	Ketoacidosis	27	
	Kidney disease (nephropathy)	28	
	Loss of consciousness	28	
	Mood changes	29	
	Nerve damage	29	
	Numbness	29	
	Protein in the urine	29	
	Red, swollen, or tender gums	29	
	Slow wound healing or frequent infections	30	
	Stroke	30	
	Sweet-smelling breath	30	
	Thirst	30	
	Urination	31	
	Visual disturbances and blurred vision	31	
	Weight gain and weight loss		
Le	sson Summary		
	eckpoint		

Lesson 2: Prevention	33
Overview	33
Prevention	33
Weight loss and keep it off	33
Follow a healthy eating plan	34
Get regular exercise	34
Stop smoking	35
National Diabetes Prevention Program	36
Lesson Summary	37
Checkpoint	37
Lesson 3: Living with Diabetes	38
Overview	38
Sexuality and Intimacy	
Sexual issues for men with diabetes	39
Sexual issues for women with diabetes	39
Other factors	39
Do no harm	39
Caregiver responsibility	39
Reporting non-consensual sexual conduct	40
Smoking	40
Costs	41
Emotional effects	
Providing support	41
Diabetes in Older Adults	42
Coexisting medical conditions	42
Polypharmacy	
Eye exams and eye health	44
Depression	45
Lesson Summary	46
Checkpoint	46
Module 2: Caregiving for Diabetes	47
Lesson 4: Person-centered care	48

LESSUI 4. FEISUI-CEIILEIEU LAIE	
Overview	48
Person-centered approach	48
Get to know the person	49
Important to	49
Important for	49
Balance	50
Person-centered practice	50
Lesson Summary	51
Checkpoint	51

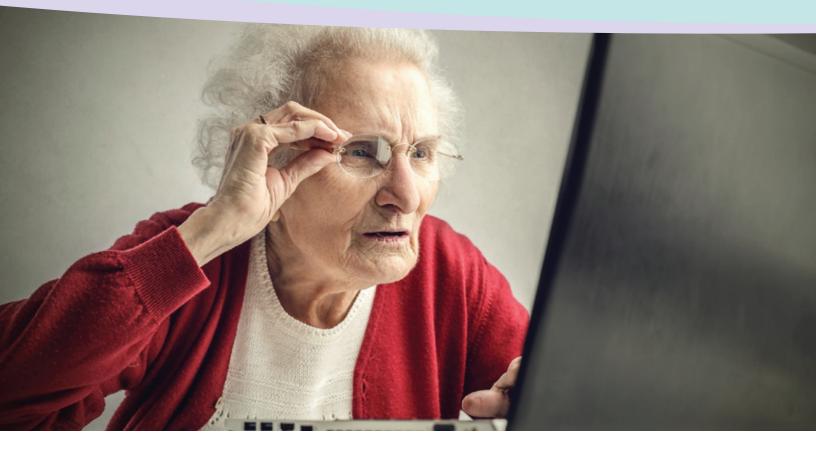
Lesson 5: Medications, treatments and therapies.52	2
Overview	2
Lifestyle Tips 52	2
Activities of Daily Living 53	3
Grooming 53	3
Bathing54	1
Dressing54	1
Eating54	1
Talking about Diabetes 55	5
Urinary Tract Infection 56	5
Diabetes ABCs 57	7
A is for the A1C test57	7
B is for blood pressure57	7
C is for cholesterol57	7
S is for stop smoking57	7
Medication58	
Medications and Side Effects 59	9
Laughter and Positive Focus60)
Uncontrolled Diabetes 61	1
Health Care Provider Types61	1
Cardiologist	
Dentist and dental hygienist	2
Diabetes Educator62	2
Endocrinologist62	2
Eye doctor62	2
Registered Dietitian Nutritionist	2
Mental Health Professional 62	2
Nephrologist62	2
Physical Therapist62	2
Podiatrist62	2
Pharmacist 62	2
Primary Care Provider63	3
Other Resources	3
Lesson Summary	3
Checkpoint64	1

Lesson 6: Nutrition	65
Overview	65
Working with the Health Care Team	65
Macronutrients	69
Trans Fats	70
Meal Planning	70
Nutrition Goals	70
Eating Plan Goals	70
Diet Choices	71
The Healthy Eating Pyramid	71
Mediterranean	73
Low-carbohydrate	73
Vegetarian	74
Activity	75
Reading Nutrition Labels	76
Serving information	76
Servings per container	76
Calories	77
Nutrients	77
Reduce saturated fat, sodium and	
added sugar intake	77
Total sugars and added sugars	78
Increase dietary fiber, vitamin D, calcium,	
iron and potassium	78
Daily Value Percentage	78
Guidelines for carbohydrates	79
Lesson Summary	80
Checkpoint	81

Module 3: Communication	82
Lesson 7: Respect Communication Dynamics	83
Overview	83
Effective Communication	84
Types of Communication	84
The ABCs of Effective Communication	85
Communication and Diabetes	86
Motivational Interviewing	88
OARS Model	88
Increasing Confidence in Communication	90
Lesson Summary	
Checkpoint	92
Lesson 8: Trauma Informed Care	
Overview	93
Adverse Childhood Experiences (ACEs)	93
Trauma	94
Trauma and Diabetes	
Physical and emotional trauma	95
Principles of Trauma Informed Care	96
Trauma-Informed Approach	97
Resilience	97
Lesson Summary	98
Checkpoint	98
Module 4: Behaviors	
Lesson 9: Approaching Behaviors	
	400

esson 9: Approaching Behaviors	
Overview	100
Diabetes Management and Behaviors	100
Strategies for Approaching Challenging	Behaviors.101
Step 1: Stop	101
Step 2: Identify	102
Step 3: Take Action	103
De-escalation	107
Strategies	107
Lesson Summary	
Checkpoint	

Module 5: Self Care	109
Lesson 10: Caregiver Self Care	110
Overview	110
Caregiver Wellness and Self-care	110
Secondary Trauma and Burn Out	111
Strategies to Cope with Caregiver Burnout	111
Lesson Summary	114
Checkpoint	114
Lesson 11: Diabetes Self Care	115
Overview	115
Seven Essential Self-care Behaviors	116
Healthy Eating	116
Physical Activity	116
Monitoring Blood Sugar	
Taking Medications	
Good Problem-Solving Skills	117
Healthy Coping Skills	
Risk-reduction Behaviors	
Accountability	
Plan it	
Share the plan	
Check in	
Encourage	
Lesson Summary	
Checkpoint	119
Compentency test	120
Introduction	
Competency Exam	
Written Test Guidance	
Instructor Procedures for Written Testing	
Grading the Written Test	
Passing Scores	121
Testing Learners with Limited English	
Proficiency and/or Learning Needs	
When Learners Do Not Pass the Written Test	
Challenge Test	
Issuing a DSHS Training Certificate	121
Evaluations	121
References	122



Introduction to This Guide

Welcome to your Diabetes, Level 1: Capable Caregiving for Diabetes Instructor Guide

This is your Instructor Guide. It is your primary training resource. It contains the information needed to facilitate "Diabetes, Level 1: Capable Caregiving for Diabetes" training program. Use this guide to help you facilitate discussion with your learners. This text is guidance for the instructor to follow the presentation. Use the preparation checklist on page 8 of this guide to help you prepare for your presentation.

Electronic slide presentation

Use the accompanying PowerPoint slides as a cue for the information you need to cover. The slide presentation should be used as created in consideration of the adult learner and to maintain consistency in the curriculum across the state. PowerPoint should only be used to enhance the learning experience and should not be the focal point. Always come prepared that electronics sometimes do not work and be prepared to present without it if necessary.

Practice, practice, practice!

It is recommended that you practice the text in advance of your training and become familiar with the flow and how it relates to the learner textbook. **Do not read directly from the text**. The information in the text does not cover all information in the textbook and that is OK. The textbook has additional information for the learner who wishes to use it as a resource later. The learners do not need ALL of the information today.

Facilitate learning

The text has been condensed to highlight key points for time considerations. Add your own relevant stories and experiences periodically through the training and make sure all key points are made from the text. Your learners come with experiences of their own. Ensure that all learners have opportunity to actively participate in the training and learn from each other through engaging activities. Know your learners. Be aware of body language. Adapt language and content as needed to achieve understanding. Add variations to allow learners to stand and move during activities.

Timing

The timing of the course is as follows: the duration of the course and exam time is eight hours. Always start class on time.

You may need to supplement with additional relevant scenarios and discussions depending on the class to achieve eight hours.

Exam

The Exam and answer guide are available as separate documents. Information on policy and testing instructions are located on page 20-21.

Evaluation

Evaluations are available as a separate document.

Overview Schedule

Торіс	Suggested Time	Objectives
Course Introduction & Housekeeping	15 minutes	Welcome and course introduction and information.
Module 1		
Lesson 1	60 min	The caregiver will define types of diabetes and identify signs and risk factors associated with diabetes.
Lesson 2	30 min	The caregiver will recognize methods to prevent or delay diabetes.
Lesson 3	30 min	The caregiver will identify various challenges of living with diabetes.
Module 2		
Lesson 4	30 min	The caregiver will recognize and identify strategies to provide person-centered care for individuals with diabetes.
Lesson 5	30 min	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	45 min	The caregiver will understand and communicate about a nutrition plan.
Module 3		
Lesson 7	30 min	The caregiver will demonstrate an ability to recognize communication styles and ways to communicate effectively.
Lesson 8	30 min	The caregiver will recognize that past traumas can affect current thinking, behaviors and actions and will identify strategies to provide trauma informed care.
Module 4		
Lesson 9	30 min	The caregiver will demonstrate a sequence of steps to approach challenging behaviors to recognize changes in behavior, mood and cognition.
Module 5		
Lesson 10	15 min	The caregiver will recognize the importance of caregiver wellness and identify strategies to prevent secondary trauma and burnout.
Lesson 11	15 min	The caregiver will communicate the importance of self-care for the individual with diabetes.
Test/Exam	30 min	

Preparation Checklist

Complete	Prior to Training (2 to 3 weeks suggested)		
	Determine final number of learners.		
	Confirm training location and room set up.		
	Prepare needed technology.		
	Ensure training materials are ready (e.g., projector, slide presentation, books, handouts, evaluations, sign in sheets, supplies).		
	Review material and practice presenting material.		
Complete	Day of Training		
	Arrive at least 30-60 minutes early to set up.		
	Ensure presentation and technology are available and working properly (projector, laptop, internet connection, sound).		
	Place supplies (e.g., markers, paper, pens) in the center of each table.		
	Check that all learner materials and sign-in sheets are available.		
	Ensure learner tables are positioned to maximize discussion and ability to view slide content. Allow adequate open space to safely engage in all activities.		
Complete	Soon After Training		
	Review learner training evaluations.		
	Follow up to answer any unanswered learner questions.		
	Document training.		
	Send completed evaluations to DSHS.		
	Create a self-improvement plan.		

Recommended Materials and Technology Checklist

Complete	Materials/Technology Suggestions	Purpose
	Laptop computer or iPad	Electronic Presentation
	Projector and connector cables	Electronic Presentation
	Large screen or white wall	Electronic Presentation
	Remote control clicker	Electronic Presentation
	Internet connection	Electronic Presentation
	Speakers (sound)	Electronic Presentation
	Flip chart or whiteboard	Reinforce learning/track responses
	Handouts (see handouts section of this guide)	Visual reference
	Timer	Activities
	Supplies (markers, paper, tape, etc)	Activities



Online Classroom

When classrooms are on Zoom, Teams, Skype or other online platform to conduct instructor led training in the online environment, instructors may establish learner expectations such as those listed below.

Learner Expectations

Registration

- You must register for this class in advance of the training.
- Limited seating is available for each training; please keep your registration status up to date.
- Registration deadlines are set to allow time for learners to receive textbooks before class.

Before Class

- Contact your instructor to get a copy of the textbook.
- Become familiar with [Platform]. (provide links for new user guide and tutorials)
- Create an environment that will support learning. (Sit at a desk, table, counter or quiet corner. Avoid sitting in bed or high traffic area.)
- Reduce distractions in the learning environment. (Close other programs on your computer. Silence your cell phone. Turn off music/television.)
- Have your ID ready to show when signing in the day of class.

Participation

- You must attend the full training and successfully complete the exam to get credit.
- Participation is expected from all learners.
- Use of the chat, reactions on camera, platform reactions, breakout sessions and whiteboard may be used.

Video

- You must have video capability.
- Turn your video on during class time.
- You may turn your camera off during break time.
- If you need to turn your camera off to step away, please send a note in chat when you leave and return.

Microphone

• Keep your microphone muted unless you are talking to minimize the background noise and distraction.

Testing

- You will receive a link to the test online.
- You must remain on video while you complete your exam.
- You must successfully complete the exam with an 80% or higher to get CE credit and certificate of completion for this course.
- Online exams will be scored immediately and you may have the chance to review.

Evaluation

- After you complete the online test, a link to an evaluation will be available for you to complete.
- Please provide information on the evaluation so that we may improve this course in the future.

Navigating the Instructors Guide

Text Book Page Numbers

Page numbers are provided for each slide to direct you and the learners to the cooresponding page in the learner textbook. These page numbers are also listed on the bottom of most slides in the PowerPoint presentation.



Objective

Objectives are provided for each lesson. Objectives are measureable statements that map each lesson. Communicating objectives at the start of each lesson gives learners a clear expectation of what you expect from them in each section.



Introductions are an important part of every class. Introductions allow learners an opportunity to participate, network and for you to gain information about your learners to improve instruction.



Information provided for the instructor to present content to the learners. Avoid reading directly from the text provided. Learn the material in advance of your first class and practice, practice! Practice with the flow and making the presentation as natural and fluid as possible. Use your own words while following the teaching sequence.

Presentation can be done by the learners themselves, by the instructor, or by prepared materials. Presentation should only account for 1/3 of your class time.



Activities are meant to engage the class and give them an opportunity to apply what they have learned. This might be in the form of discussions, group work, sharing, reflecting, working through scenarios or roleplaying. Get people involved and moving. This is an active population of learners. Have them stand in huddles in small group discussions on occasion to offer variety. Give everyone a voice. Call on learners who are not as vocal to check for understanding. Encourage learners and give them time to use their books, write in them, and complete the activities in or near the activity boxes as you go to reference later. Application and feedback should account for 2/3 of your class time.



Your opportunity to highlight and reinforce correct responses and to provide additional information as needed to achieve understanding. Feedback can be given before an activity, during an activity and after an activity. Application and feedback should account for 2/3 of your class time.



Media icons are available on the slides that correspond to a video to reinforce the subject. Clicking on the video icon or embeded video in the presentation will launch the video. Internet connection should be established before the course begins. Alternative activities are suggested if internet access or accessing the video is not possible. When using virtual learning platforms, ensure that you select the option to share your computer sound in the platform so your learners can hear the videos.



Content that should be reinforced and covered before moving on.



Additional handouts are provided in this guide and have been provided in the learner books as well.



Each lesson ends with a checkpoint. Use the checkpoint to check for understanding from the class. It is important that everyone understands before moving on to the next lesson.



Resource

Resources are provided in the back section of this guide. Resources are also provided throughout the instructor guide to provide notes or more information so you are prepared to answer questions and provide feedback. It is not necessary to cover this information in detail.

Course Introduction

Slide 1







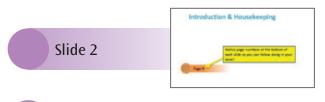
Thank you for attending and welcome to the Diabetes, Level 1 - Capable Caregiving for Diabetes Care. Our goal with this course is to give you more tools to provide the best possible care for the individuals you care for.

Materials

Each of you has received the course textbook. I encourage you to use this book as a place to capture your notes and reference information that you may find useful when returning to your job.

We will cover a lot of information today. If you have any questions, comments or feedback – please speak up. You will also receive an evaluation at the end of class and your honest input is appreciated so we can improve future classes and updates to the course book.

Introduction & Housekeeping



Page Numbers

Notice page numbers at the bottom of each slide so you can follow along in your book.

Introductions

First, I would like to take a few minutes to do some introductions.

(Note: Depending on class size, you can modify to accommodate the group and time allowed. It is good to establish why individuals are in your class so you can address their needs during the training. The introductions should take no more than 15 minutes.)

Small class: Ask each person in the room to give:

- name
- how long they have been caregiving / background and
- what they would like to learn from the class. (Take note to make sure each point is covered by the end of the training).

Large class: Ask each person in the room to give:

- Name
- How long they have been caregiving

Instructor: give a brief introduction of qualifications / background with consideration to time.



Presentation

Let's review a couple of housekeeping items before we begin.

- **Agenda:** This is an 8-hour course. The 8-hours includes time for instruction, activities, breaks and the final exam.
- **In person classroom:** Location of the restrooms, break areas, fire exits.
- Virtual classroom: navigating the online classroom interactions reactions, raise hands, whiteboard, chat, video reactions, etc.

Other housekeeping items you might include:

- Feel free to stand up and stretch anytime
- Use the restrooms as needed
- Ask questions any time and we will parking lot the question if it is something we will cover later
- Lunch options
- Refer to learner expectations list for virtual classrooms on page 10.
- Other expectations





Parking Lot: Add a piece of paper or use a dry erase board and write "Parking Lot" on the top. Use this space to write questions down that you are aware will be covered later in the presentation or can be addressed during a break. This will keep you on the current subject and validate that the question is heard and assure it will be addressed today. As they are addressed in normal class time, cross them off. Cover anything left at the end of class.



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





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.

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 the disease works, the signs and 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:

- 6,046 deaths
- 125,032 hospitalizations

- 685,570 people with diabetes
- · 2 million people with prediabetes
- A total cost of \$6.7 billion

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, your textbook has additional information in it or you can access the report referenced in your book.



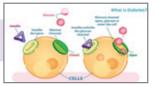
Resource

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

What Is Diabetes?

Page 6



Presentation

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.

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.

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 test that is based on points 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 may occur when a woman is pregnant) 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?

Use the test on the presentation or take the risk test:

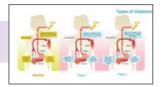


Charli Hopper scored six points on his risk test. He is at an increased risk for having prediabetes and at a high risk for Type 2 diabetes.

Charli cannot change some of the points to reduce his risk. These include his age, gender and family history of diabetes. Charli can increase his physical activity level and decrease his weight to reduce his risk.

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 percent 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. Autoimmune, genetic and environmental factors are involved in the development of Type 1 diabetes.

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.



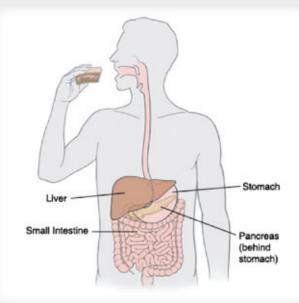
Play this video: Understanding Type 2 Diabetes (3:45) https://youtu.be/JAjZv41iUJU

Alternate Presentation: (if no internet connection) See Alternate Presentation section on page 18.



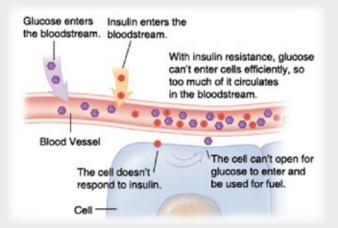
In your books on page 9, you will notice some images from the American Diabetes Association.

The digestive system breaks down food, resulting in a sugar called glucose. Some of this glucose is stored in the liver. Most of the glucose enters the bloodstream and travels to cells and used as fuel.



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.

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.



American Diabetes Association Understanding Type 2 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.

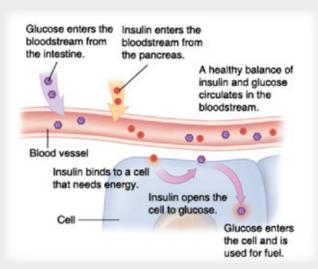
Eventually, the pancreas cannot produce enough insulin to overcome insulin resistance. As less and less glucose enters cells, it builds up to a harmful level in the bloodstream. This is known as high blood sugar or hyperglycemia. The result is Type 2 diabetes. The cells become starved for energy, which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



Gestational diabetes







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

Infections

Other illnesses

Malnutrition

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.

Blood sugar amounts above 180 to 200 milligrams per deciliter (mg/dL) are considered high.

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

Minimization

Page 11

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?

Peedback

George is experiencing some early signs of high blood sugar. Support George by finding ways to lower blood sugar. Food, movement, check for stress, illness, and medications as appropriate. It could also be a UTI. Think about future planning to minimize hyperglycemia.

Report and documentation. Check your policies and procedures.

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 80 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





Application

Page 12

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?



Madelyn is experiencing early warning signs. Support Madelyn by finding ways to raise her blood sugar. The "rule of 15" is commonly used as a guideline for treatment of hypoglycemia. The 15-15 Rule: For low blood sugar between 55-69 mg/dL, raise it by following the 15-15 rule: have 15 grams of carbs and check your blood sugar after 15 minutes. If it's still below your target range, have another serving. Repeat these steps until it's in your target range. Once it's in range, eat a nutritious meal or snack to ensure it doesn't get too low again.

Food, medication, re-check blood sugar, rest. Think about future planning to minimize hypoglycemia.

Report / documentation. (May be different in each setting)

Cholesterol





Presentation

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.



Play this video: Diabetes and cholesterol (1:59) Diabetes UK https://youtu.be/9oOVIkIOueU



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



- 1. Good
- 2. Bad
- 3. Bad
- 4. Good
- 5. Bad
- 6. Good

Effects of Diabetes on the Body



		Effects of Diabetes on the Body
Catanatis, writespaths and glassions		Los of constitucions
Damaged Mood result		Musel danges
Dry masth	-	None Series
Drg. cracked ddin		Numbers ar Realing in Astals or Real
Decres/hanger	÷	Protein in the united
Parligues, Woodiness, Justi of energie, Arthough		Red, conflict, or londier game
Post profilers		New wourst heating at heapont infections
dantroppends .		Stoke
Heart-Bacan		Inexet-scientifing investio
High Mond pressure		These
Referal Media		Univalian
Killing discuss (supprogethed		Maget distortances / Married vision
		Margin Inc. / wright gate

Presentation

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 15-22 in the textbook.

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

risk of stroke

Risk of stroke for someone with diabetes is four times higher than for someone without diabetes.

extreme thirst

Extreme thirst is often one of the first noticeable symptoms of diabetes.

sweet-smelling breath

Breath that has a sweet scent may indicate high levels of ketones, a serious complication of diabetes.

risk of heart disease

High blood pressure and damaged blood vessels put added strain on the heart, increasing the risk of cardiovascular disease.

fatigue and lack of energy

Overall kidney and pancreas problems can cause you to feel more tired. This can also make it harder for you to concentrate.

pancreas _____ malfunction

A poorly functioning or nonfunctioning pancreas won't produce the insulin your body needs to convert glucose into energy.

excessive urination

Having to urinate frequently may be an early warning sign of diabetes.

damaged blood vessels

Too much glucose in your system can cause restricted blood flow, leading to a variety of symptoms and damage to the blood vessels. Smokers with diabetes are at an even higher risk.

nerve damage

Diabetes causes nerve damage, which often feels like "pins and needles." Damaged nerves can also altor your perception of heat, cold, and pain, increasing your risk of injuries.

foot problems

Diabetes increases your risk of calluses, infections, or ulcers of the foot. This can be caused by nerve damage from high blood sugar and a decrease in circulation to your feet.

loss of consciousness

Without treatment, diabetic ketoacidosis can lead to loss of consciousness.

visual disturbances

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

cataracts and glaucoma

If you have diabetes you have an increased risk of cataracts and glaucoma compared with people who don't have diabetes.

risk of infections

Diabetes can also raise your risk of bacterial, fungal, and yeast infections. Your feet are the most vulnerable to infection.

high blood pressure

If you have diabetes, you're at increased risk of developing high blood pressure.

gastroparesis

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

protein in the urine

High levels of protein in your urine may mean your kidneys have some damage and aren't functioning well.

ketoacidosis

To make up for the lack of insulin, your body uses other hormones to turn fat into energy. This produces high levels of taxic acids called ketones, which can be life-threatening.

dry, cracked skin

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

Healthline https://www.healthline.com/health/ diabetes/effects-on-body#1

iii Application

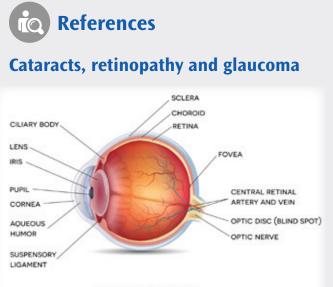
Page 15

Instructor notes: You do **not** need to cover all effects. Some will naturally come up during the course of the curriculum that you can circle back. Let learners dictate what they want to know more about and let them know they can reference the book more later for more information.

Review the list of effects of diabetes below. Place a checkmark on the effects that most interest you.

- 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 \square 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 Find the effects checked above on pages 25-31 of this instructors guide and highlight or circle the title. As a class, review the top effects of interest. Take time to individually review any effects not covered as a class. Alternate activity: • Break into small groups.
 - Identify two (2) effects.
 - Discuss in-group.
 - Report back: information that surprised you, new to you, interesting.



NORMAL EYE

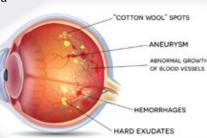
Diabetic eye disease includes glaucoma, diabetic macular edema, diabetic retinopathy and cataracts.

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



eye. Diabetic retinopathy affects nearly 7.7 million Americans age 40 and older.

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.



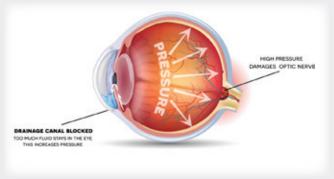
Glaucoma

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.



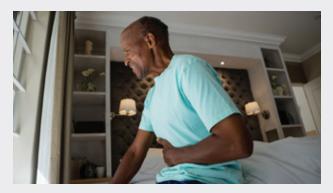
Gastroparesis

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.

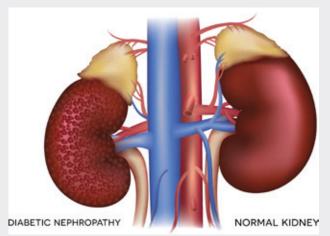
Kidney disease (nephropathy)

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.

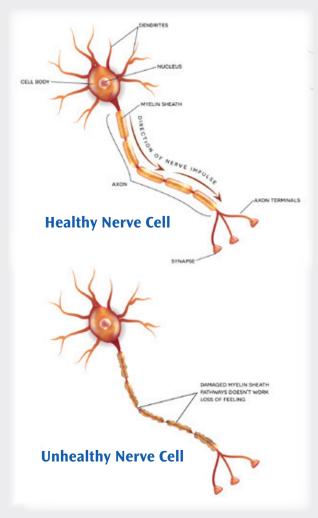
Mood changes may include anxiety, depression and stress. Mood changes may occur when blood sugar is too high or too low. Another cause of mood changes may come from worry or stress of managing the diabetes over time. It can lead to feelings of being overwhelmed and burned out.

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

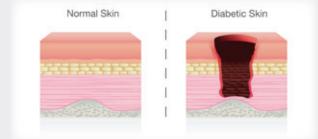
Diabetes may weaken the ability to fight germs. This increases the risk of infection in the gums and bones that hold the teeth in place. Gums may pull away from the teeth. The teeth may become loose, or sores or pockets of puss may develop in the gums. This is more frequent if there is already a gum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

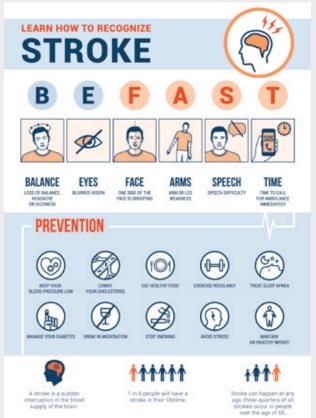
High levels of blood glucose can lead to poor blood flow and impair the body's natural healing process.

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.

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 fatty like substance found 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: Lesson 1

Page 23

Checkpoint

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

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.

- **A.** Type 1
- **B.** Type 2
- C. Gestational
- 2. 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.
- <u>C</u> 2. This type of diabetes develops in 2 to 5% of all pregnancies but usually disappears when pregnancy is over.

A 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.

Read the statements below and indicate if they are true or false			False
4.	Diabetic eye disease includes glaucoma, diabetic retinopathy and cataracts.	X	
5.	Diabetes increases risk of calluses, infections or ulcers of the foot.	X	
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. (Instructor note: this is false. Kidney disease can be prevented by keeping blood glucose in the target range. Not everyone with diabetes develops kidney disease.)		x
8.	Diabetes most often damages the nerves in the arms and hands. (Instructor note: this is false. Nerve damage most often occurs in the legs and feet.)		x
9.	Diabetes can raise the risk of bacterial, fungal and yeast infections.	X	
10.	Extreme thirst only occurs when dehydrated from not drinking enough water. (Instructor note: this is false. 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.)		X

Lesson 2: Prevention

Page 24

son 2 Presention

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

Follow a healthy eating plan





Presentation

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.

Get regular exercise





Page 25

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

Application

Page 26

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.



Some options include:

It is too hot, cold or wet outside.

Work out indoors. Dress for the weather.

For cold weather: Dress in layers, wear a hat to avoid losing heat through your head, Wear mittens or gloves. Do not overdo it.

In hot weather: Exercise in the early morning or after the sun sets, take frequent rest and water breaks, swim.

I do not have time.

To fit fitness in anytime: Break your 150 minutes into smaller chunks. Look for short, 10-minute periods during the day in which you can do some physical activity.

Park your car farther away from the place you want to go. Get off the bus or train one stop early. Walk the rest of the way. Take stairs instead of elevator. Use a fitness app.

To fit in fitness at home: Walk your dog briskly. Sweep or mop your floor briskly. Wash your car briskly. Stretch, do sit-ups, or pedal a stationary bike while you watch TV. Mow your lawn with a push mower. Rake leaves. Plant and care for a vegetable or flower garden. Replace part of your TV/computer time with physical activity. Set aside a block of time every day for planned physical activity. Make being active a part of your daily routine, just like brushing your teeth and taking a shower.

To fit in fitness at work: Take a brisk walk during your coffee or lunch break. Ask a friend to go with you. Take part in an exercise program at work. Join a nearby gym. Stop off before or after work, or during your lunch break. Join the office softball team or walking group. Use a copy machine on the other side of the building.

I do not have a car.

Work out in your own home or area. Join a neighborhood-walking group. Find free resources online for exercise videos.

I feel embarrassed.

Work out in your own home. Work out with a friend.

It costs too much.

Participate in free activities like walking. Buy workout clothes and equipment on sale. Find free fitness classes at your library or community center. Use free workout videos online.

It is boring.

Dance. Play with your kids. Work out with a friend. Use a fitness app. Listen to music, watch TV, or talk on the phone while you are active. Keep trying new things until you find something you like.

It is painful or tiring.

Talk to the healthcare provider to find ways to get active that may be appropriate. Work out safely. Work out at the time of day when you have the most energy. Walk slowly or swim. Do yoga or Tai Chi. Chair exercises such as yoga, chair Pilates and chair stretches.

Smoking



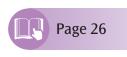
Presentation

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.

We will talk more about smoking in future modules. Your books have information and resources on helping the person quit when they are ready.

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 to 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
- Eat 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.



Play this video: A Change for Life (5:27) Centers for Disease Prevention (CDC) https://youtu.be/mRVZ9lkubag

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: Lesson 2



Objective: The caregiver will recognize methods to prevent or delay diabetes.

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

Page 29

Lesson 3: Using 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





Presentation

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 longterm diabetes.

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

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

There is a list of sexual issues for men and women with diabetes in your books on page 30. These include things like erectile dysfunction, low testosterone, lack of lubrication and increased yeast infections.



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 lubrication

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)

Smoking





Presentation

We talked about smoking with prediabetes and prevention of 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.

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.

Application

Page 31

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?



Highlight positive responses. Are there free smoking cessation programs available?

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.

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.

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 x.

Diabetes in Older Adults







Presentation

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 (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 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.

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.



Highlight positive responses.

The instructor can create a specific scenario with a combination of coexisting conditions.

Learn about other conditions and taking classes can be helpful to provide better care. Learn self-management skills for other chronic conditions.

Polypharmacy



Presentation

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, page 48.

Eye exams and eye health





Presentation

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 self-care 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.



Highlight positive responses.

Encourage them to make appointment with an eye care professional.

Think about ways to improve quality of life. For example, a person who loves to read might enjoy audio books, large print books or a device to provide weather updates, music or other information triggered by voice prompting.

Find ways to reduce the risk of falls in the environment such as use of rugs and furniture placement.

- Remove throw rugs or use double-sided tape to keep them from slipping.
- Make sure all rooms and hallways are well lit and have easily accessible switches or motion sensor lights.
- Install handrails on stairs and grab bars in the bathroom/shower.

Depression

Page 36



Presentation

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 wellbeing and quality of life.

Lesson Summary

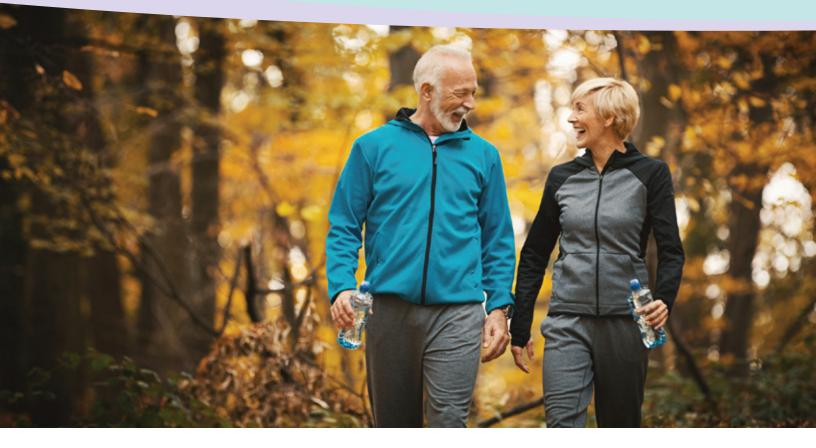
- The person you care for may experience sexual issues as an effect of long-term diabetes.
- Cigarette smoking is a cause of Type 2 diabetes. Smokers have a 30% to 40% greater risk of developing diabetes than nonsmokers. The risk increases with the number of cigarettes smoked per day.
- This population (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: Lesson 3



Objective: The caregiver will identify various challenges of living with diabetes.

	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.	X	
The costs of diabetes care are nothing to worry about for people with diabetes. (Instructor note: The costs associated with diabetes can be devastating. Worrying about debt may trigger stress, fear, shame, panic, anger and depression.		×
Older adults with diabetes are at lower risk for depression and cognitive impairment compared with others their age who do not have diabetes. (Instructor note: Older adults with diabetes are at a higher 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. (Instructor note: Multiple medications not only add to the cost and complexity of the treatments, it also places individuals at greater risk for adverse drug reactions and drug-drug interactions.		×
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.

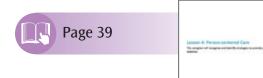
Lesson 5: Medications, Treatments and Therapies

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





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



Overview

Person-centered considers the individual you provide care for as the experts in their own care.

Person-centered care is not about giving people what they want or providing information. It 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.
- 3. 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



Page 40

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.



Highlight positive responses.



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



Page 40

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?



Highlight positive responses.

Instructor notes: You can use your own example. What are the person's goals? What are some shortterm and long-term goals? When responding: Are learners making a connection? Are they managing the health and safety for the individual living with diabetes?

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



Page 41

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?



Highlight positive responses.

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: Lesson 4



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

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	X	
3. Places to go	X	
4. Prevention and treatment of illness		X
5. Relationships	×	
6. Routines and rituals	×	
7. Safe environment free from fear		×
8. Sense of being valued		×
9. Sense of contribution to community		×
10. Status and control	×	
11. Things to do	X	
12. Things to have	X	

Lesson 5: Medications, treatments and therapies



mon 5. Medications, bractments and therapies service at each parts solution on data, we is report to the data we appear to the testing measure a maker any system of service.



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. Application

Page 43

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.



Highlight positive responses.

Lifestyle Tips

Page 43





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







Presentation

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?



Highlight positive responses.

Louis:

Possible responses: Support Louis to control his blood glucose levels. Encourage him to brush twice a day. Also encourage regular flossing and visit his dentist for routine checkups.

Over the counter oral care such as Biotene. Encourage adequate hydration. If dry mouth remains an issue despite these measures, encourage a conversation with primary care provider, as there are medications for dry mouth.

Peggy:

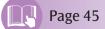
Possible responses: Manage blood flow in feet by putting feet up while sitting and wiggling toes.

If sitting for long periods of time, gentle reminders to get up and move around or do simple leg stretches; massaging feet can stimulate circulation; compression socks or stockings; if circulation problems get worse in cold conditions, keep temperature at home comfortable and dress in layers, foot warmers when needed.

Margaret:

Possible responses: A hand-held mirror may make it easier for the person to look in hard to see places.

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.



Play this video: Coping with the emotional impact of diabetes | John's Story (3:25) Contributor: Diabetes UK https://youtu.be/XJWBHfbSqEE



Play this video: Diabetes and emotional wellness | Zena's story (3:37) Contributor: Diabetes UK https://youtu.be/j2YX4b7KWwQ



Page 45

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



These conversations may be difficult.

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. Opening up about the diabetes could relieve frustration of managing the diabetes

Emotional impact: A range of psychological problems can occur including depression, anxiety and diabetesrelated distress which can affect self-management as well as the individual's quality of life.

Physical impact: Potential complications that include heart disease, stroke, kidney damage and nerve damage. We've discussed vision problems, issues with skin and feet. The physical impact can make self-management more challenging.

Urinary Tract Infection





Presentation

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



Page 45

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?



Highlight positive responses.

Possible response: Check Maria's temperature. Contact Maria's health-care provider right away. Make a plan to prevent reinfection.

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.

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





Presentation

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

There is a handout of medications and side effects in your book on page 48. You can use these as a reference later. You may or may not come across these medications. It is most important to be aware of side effects and when you need to report and document.

Handout

References / 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?



Highlight positive responses.

Possible responses: 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, Vomiting, Weight gain, Hypoglycemia, weight loss, hypotension, increased urination, genital infections...

In rare cases, some medications could cause serious conditions.

Call a doctor 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. Severe, disabling joint pain, edema.

Report signs of acute pancreatitis (severe abdominal pain, vomiting).

Laughter and Positive Focus







Presentation

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







Presentation

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.

Ask: Take a moment to review the list of health care provider types in your books on pages 50 - 51. Are there any that you have questions about?



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.

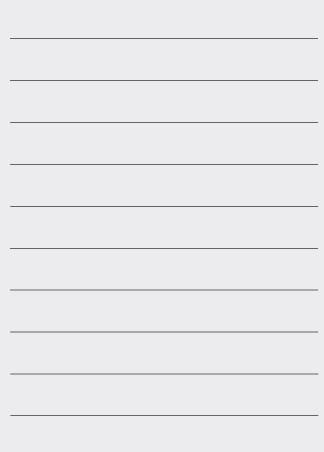
Primary care providers on the team may include:

- 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.

Notes



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: Lesson 5



Objective: The caregiver will identify possible medication side effects, ways to respond to side effects and recognize nondrug therapies to reduce some symptoms of diabetes.

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

- **1.** When caring for feet, support the individual to:
 - A. Soak feet daily in hot water and use lotion between the toes.
 - **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.
 - C. Walk daily with bare feet and avoid wearing shoes, socks or slippers.
 - **D.** All of the above
- **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
 - 🔀 Diarrhea
 - Higher risk of diabetic ketoacidosis
 - Increased risk of heart failure
 - Increased risk of pancreatitis
 - **X** Joint pain
 - Low blood pressure
 - 🗙 Nausea
 - **V**I Urinary tract infections
 - **Vaginal yeast infections**
 - X Vomiting
 - 🔀 Weight gain

Lesson 6: Nutrition

Page 53

Lesson & 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.



Page 53

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.



Highlight positive responses.

Working with the Health Care Team







Presentation

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: Carbs







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
- Juice
- 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)



Page 55

Identify healthy carbs that make up a rainbow.



Highlight positive responses.

Red: beets, red bell peppers, tomatoes, cherries, cranberries, pomegranates, strawberries, radicchio, radishes, raspberries, red apples, red grapes, red potatoes, rhubarb, strawberries, watermelon...

Orange: carrots, sweet potatoes, cantaloupes, pumpkin, oranges, orange bell pepper, acorn or butternut squash, apricots, grapefruit, mangoes, nectarines, papaya, peaches, tangerines...

Yellow: yellow bell peppers, squash, yellow apples, corn, lemons, pineapple, summer squash...

Green: broccoli, Brussel sprouts, asparagus, green apples, cucumbers, chard, zucchini, kale, cabbage, mustard greens, artichokes, avocados, bok choy, celery, collard greens, green beans, green grapes, green onions, green peppers, kiwi, leeks, limes, okra, pears, peas, romaine lettuce, snow peas, romaine lettuce, snow peas, spinach, sugar snap peas, watercress

Blue or purple: eggplant, red onions, blackberries, blueberries, prunes, currants, dates, purple grapes, plums, purple figs...

White: Banana, cauliflower, garlic, Jerusalem artichoke, mushrooms, onion, potatoes, parsnips, shallots...

Macronutrients: Protein







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?

Feedback

Answer: No. Eating protein does not have to mean eating meat. Protein is in nuts, nut butters, seeds, beans, lentils, tempeh, hummus, tofu, quinoa. Protein can also come from whole grains, dairy and eggs.

Macronutrients: Fats







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

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

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.



Page 57

Identify foods that have healthy fats.



Highlight positive responses.

Possible answers:

- · Almond butter and other nut butters, Avocado, Olives
- Fish like salmon, tuna, sardines, trout
- Nuts like almonds, pecans, cashews, walnuts,
- · Seeds like: pumpkin, sunflower, sesame, flax and chia

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: The Healthy Eating Pyramid

Page 58-59





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.

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:

- Nuts
- Seeds
- Beans
- Tofu
- Fish
- Poultry
- Eggs

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

Diet Choices: The Healthy Eating Plate



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

Diet Choices: Mediterranean





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.

Diet Choices: Low Carb





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 shortterm 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.

Diet Choices: 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.

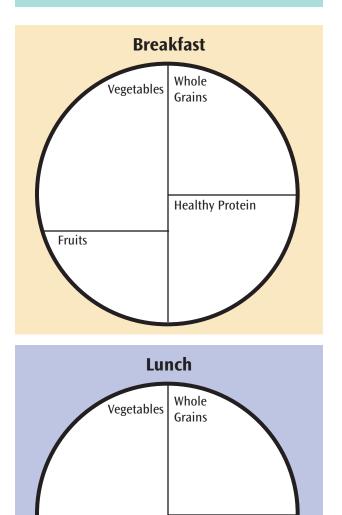
A pesco-vegetarian also consumes fish A semi-vegetarian consumes meat sometimes. The most important characteristic of these diets is the emphasis on whole grains, fruits and vegetables, legumes and nuts and reducing or limiting animal products.

Activity



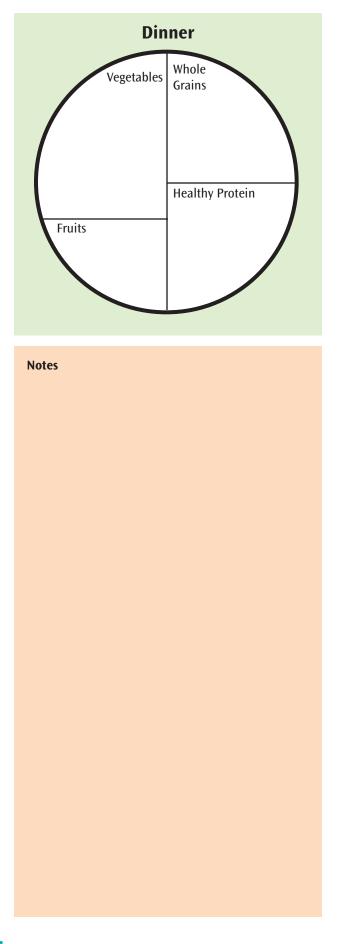
Using the healthy eating plate format below. Create a breakfast, lunch and dinner that you would personally enjoy and is healthy and nutritious. Share your plan with someone else. Discuss what you would like or dislike about each others plan. Consider the importance of person centered meal planning.

Instructor Note: Break class into 3 groups and assign each group a meal. Work through creating a healthy plate and report back.



Healthy Protein

Fruits



Reading Nutrition Labels





Presentation

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

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%

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 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.



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



A portion is how much food you choose to eat at one time, whether in a restaurant, from a package, or at home. A serving, or serving size, is the amount of food listed on a product's Nutrition Facts, or food label.

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.

Reading Nutrition Labels







Calories

Example:

Amount per serving	
Calories	280

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.

Example:

Total Sugars 6g	
Includes 0g Added Sugars	0%

This means that the product has 7 grams of Added Sugars and 8 grams of naturally occurring sugars for a total of 15 grams of sugar.

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.



Highlight positive responses.

Good: No added sugars, ok on dietary fiber, ok on potassium, good calcium.

Bad: High in sodium, high in saturated fat. Low in Vitamin D and iron.

Reading Nutrition Labels





Presentation

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



Application

Page 68

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



Answers: 2.5, 5, 19.5. 20 would be an acceptable response.

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 Omg	0%
Sodium 160 mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 0g Added Sugars	0%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%
*The % daily Value (DV) tells you how much a nutrient in a serving of 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: Lesson 6

Page 70

Objective: The caregiver will understand and communicate about a nutrition plan.

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

1. There are three main types of c	arbohydrates in food.	
A. Starch, protein, fat	B. Sugar, starch, fiber	
C. Fiber, starch, fat	D. All of the above	
 Product(s) that contains sugar a A. Soda/pop 	dded by a manufacturer to increase flavor and shelf life. B. Fruit juice	
C. Flavored yogurts	D. All of the above	
3. Protein may come from many s	ources including:	

1	'	0
A. Nuts, seeds, beans		B. Fish, poultry, eggs
C. Tofu		D. All of the above

4. 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	D. All of the above

5. There is one preferred diet for people with diabetes.

A. True **B.** False (Instructor note: There are many diet options. An individualized approach is recommended. Pages x-x highlight some recognized diet options.)

- 6. All nutrient information on the nutrition label is based on calories.A. TrueB. False (Instructor note: It is based on serving size)
- 7. Calories are a measurement of how much energy you get from a serving of the food.A. TrueB. False
- 8. To improve health, a person should reduce saturated fat, sodium and added sugar intake.A. TrueB. False
- 9. To improve health, a person should reduce dietary fiber, vitamin D, calcium, iron and potassium.
 A. True
 B. False (instructor note: These should all be increased rather than decreased)



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





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.



Page 72

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?



Highlight positive responses.

Effective Communication





Presentation

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 nonconfrontational. 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.



Page 73

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



Highlight positive responses.

Possible answers:

Negatives: arms folded, tense facial expression, body turned away, eyes cast down, sitting slumped, gazing at something else, fidgeting, picking

Positives: open posture, firm handshakes, good eye contact, upright posture. Head nodding, Keeping your arms by your sides or loose in your lap, Leaning in slightly...

The ABCs of Effective Communication





Presentation

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





Presentation

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.

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.

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

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 time. eats 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 well.	
Control, controlled, uncontrolled, well controlled, poorly controlled	Manage is checking blood glucose levels a few times per week. is 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 person first. Avoid labeling someone as a disease. When in doubt call someone 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 are 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 onset. Use words that build on strengths and respect their right to make their own decisions.	
Refused	Declined		
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	has a sore that is not healing and is having a difficult time with offloading. I'm having a difficult time with	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	



Page 77

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.
- **2.** Sam is being a difficult person refusing his medications before he has his coffee.
- **3.** Sarah is non-compliant with her nutritional plan making her blood sugar poorly controlled.
- 4. Mark is diabetic and Helen is normal.



Highlight positive responses.

Possible answers:

- **1.** Martha is choosing to eat cookies and ice cream in the evenings.
- **2.** Sam is having a difficult time taking medication when he first wakes up and would like to take them after his coffee.
- **3.** Sarah eats fruits and vegetables a couple times per week and would like to find a plan that works better for her to manage.
- **4.** Mark has diabetes. Or, Mark is a person living with diabetes. Helen does not have diabetes.

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.

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.



Page 78

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."



Highlight positive responses.

Instructor note: Watch for discussions around repeating, paraphrasing, repeating back in own words that allowed Kim to make her own decision.

Increasing Confidence in Communication

Page 79





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



Highlight positive responses.

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: Lesson 7



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

Read the sentences below. On the lines provided, write the best word that makes the sentence true.

1.	The two main types of communication are	verbal	and	nonverbal	

2. Nonverbal Communication is <u>tone</u> of voice <u>body</u> language and <u>proximity</u>.

3. The ABCs of Effective Communication are Active <u>listening</u>, <u>body</u> language, Clarify information, Develop Rapport, <u>explain</u> clearly, <u>feedback</u>, Give clear signals, Hear the sound of silence and In conclusion.

4. The OARS Model of Motivational Interviewing stands for <u>open-ended</u> questions, <u>affirmations</u>, <u>reflective</u> Listening, <u>summarizing</u>.

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.



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.

Adverse Childhood Experiences (ACEs)

Page 81





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, wellbeing 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.

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







Presentation

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.



Highlight positive responses.

Possible response:

Safety: Provide a warm and welcoming environment for Andrea. This increases a feeling of safety. Provide emotional support by acknowledging the hurt if she brings it up.

Trustworthiness: Be consistent between what you say and what you do. Communicate openly about the care you are providing.

Choice: Give Andrea choices that are appropriate or provide limited, specific choices.

Collaboration: Work with Andrea and the care team/ family. Find what works best for her to support her strengths. Provide opportunities for her to share perspectives and concerns, when appropriate. Empowerment: Encourage Andrea to use her skills and abilities. If something is not working or you are frustrated, find new ways of working together.



Play this video: The "life-changing" story Oprah reports this week (5:11) Contributor: 60 minutes https://youtu.be/dF20FaQzYUI

Trauma Informed Approach







Presentation

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.



Play this video: Dr. Pickens explains trauma-informed approach (2:05) Contributor: Washington Health Care Authority https://youtu.be/6syEFO4OSFU

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: Lesson 8

Page 85

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

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

Page 84





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.



Highlight positive responses.

Strategies for Approaching Challenging Behaviors





Presentation

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.

P Application

Page 88

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.



Highlight positive responses.

- 1. Jeffery: Take a step back and take a deep breath. Evaluate if you are in danger.
- 2. Paula: Pause and remain calm. Count to ten.
- 3. Harry: Remain non-judgmental and calm. Separate the behavior from the person.
- 4. Lynda: Recognize the behavior is not about you. Take a deep breath.

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?



Page 90

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.



Highlight positive responses.

- 1. Jeffery: Identify what is going on. Is Jeffery experiencing pain? Is this a trauma response? Is Jeffery's behavior a problem? Is he embarrassed by his feet or by needing help? Is there something that he does not like?
- 2. Paula: Identify what is going on. Is there a pattern to Paula's screaming? What lead up to Paula's behavior? What happened just before the behavior started? Were there other people involved when the behavior occurred?
- 3. Harry: Identify what is going on. Find out of Harry's pants are uncomfortable. Is his prosthetic leg bothering him? Does he prefer other clothing?
- 4. Lynda: Identify what is going on. Why is Lynda crying? How is she really feeling? Did something happen? Is she trying to communicate a need or desire? Are there any patterns you can see?

Step 3: Action

Page 90





Presentation

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?



Highlight positive responses.

- Jeffery: Take Action Stop doing the task. Ask him questions and listen. Does Jeffery have an infection or ulcer on his foot that is causing pain? . Explain what you are doing. Ask Jeffery to do all or part of the personal care tasks that he can do himself. Seek medical attention as needed.
- 2. Paula: Take Action Ask her why she is screaming and cursing and listen to her response. Redirect her to another room so that you can talk with Harry.
- 3. Harry: Take Action Maintain dignity of Jeffery (get a blanket, redirect him, etc), Inspect his legs for irritation, injury, infection, rash, etc. Find him clothes that are more comfortable. Let Jeffery select different clothing. Seek medical assistance if needed.
- 4. Lynda: Take Action Avoid reacting emotionally yourself. Take Lynda to a quiet area and try to calm so she can regain control of her emotions. Give validation of feelings and give her the chance to talk about feelings. Provide feedback gently and supportively after she regains control. Ask if she would like some time to herself and come back later. Problem solve with Lynda to come up with some celebration ideas that focus on activities rather than food. Monitor for signs of depression. Seek medical assistance if needed.

De-escalation





Presentation

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.
- Stay 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: Lesson 9



Objective: The caregiver will demonstrate a sequence of steps to approach challenging behaviors to recognize changes in behavior, mood and cognition.

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



Highlight positive responses.

- 1. The answer is B. Still in the investigative role to identify why Charles is angry. Was he given a choice for his meal? Is he frustrated by eating salad again?
- 2: The answer is A. Finding a solution is taking action What kind of actions might be taken? Find her a snack? Make sure she is eating enough during meal times?



Module 5: Self Care

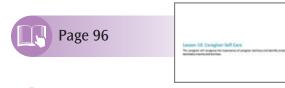
Lesson 10: Caregiver Self Care

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





The caregiver will demonstrate a sequence of steps to approach challenging behaviors to recognize changes in behavior, mood and cognition.



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?



Highlight positive responses.

Caregiver Wellness and Self-care

Page 96





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.

 Application

 Page 97

 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



Highlight positive responses.

Secondary Trauma and Burn Out





Presentation

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

Page 98





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.
- **Checkpoint: Lesson 10**



Objective: The caregiver will recognize the importance of caregiver wellness and identify strategies to prevent secondary trauma and burnout.

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
1. Put your needs first.	1. Put others needs first.
2. Isolate yourself.	2. Connect with friends.
3. Do everything yourself.	3. Ask for help.
4. Take regular breaks.	4. Work extra shifts.
5. Deal with your feelings.	5. Keep your emotions inside.
6. Find time to relax.	6. Over schedule yourself.
7. Find more ways to please others.	7. Just say no.
8. Complete every task on schedule.	8. Set goals.

- 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.

Lesson 11: Diabetes Self Care

Page 100

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





Presentation

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.



📕 Page 100

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.



When Roger is feeling his best, he can garden or woodwork. If he is having increased numbness or feeling tired, that would be a good time to rest and read. Roger may want to check his blood sugar before and after periods of activity, especially if he's more active in the garden. He may want to have healthy snacks he can bring outside. Also since, he is often tired, making sure he is practicing good sleep hygiene and getting adequate rest.

Seven Essential Self-care Behaviors: 1. Healthy Eating





Presentation

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?



Involve friends and family in creating the menu; host a potluck or BBQ where everyone brings a healthy dish.

Connect them; give options, private dining room. Look up a menu or plan a menu that is healthy and enjoyable.

Seven Essential Self-care Behaviors: 2. Physical Activity

Page 101





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

Seven Essential Self-care Behaviors: 3. Monitoring Blood Sugar







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.

Seven Essential Self-care Behaviors: 4. Medications, 5. Problem Solving, 6. Coping Skills, 7. Risk Reduction







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.

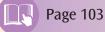
Encourage

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 self-care 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: Lesson 10



Objective: The caregiver will communicate the importance of self-care for the individual with diabetes.

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

Competency Exam

Introduction

The Diabetes, Level 1 – Capable Caregiving for Diabetes exam is used to measure understanding of the objectives of this course.

Competency testing policies and procedures for the written test is outlined in this document. Instructors must follow these testing guidelines. Read these policies carefully before you begin teaching. You are required to accurately implement these policies. Please refer to the applicable Washington Administrative Code (WAC) and/or your instructor contract for additional terms which may not be outlined in this guidance.

Competency Exam

- The curriculum must be taught as designed.
- The training must include the DSHS-developed competency test.
- The competency test must be administered consistently, according to rule:
 - (1) The person teaching the course must administer or supervise the administration of all testing; and
 - (2) The tester must follow DSHS guidelines for:
 - (a) The maximum length of time allowed for testing;
 - (b) The amount and nature of instruction given to students before beginning a test;
 - (c) The amount of assistance to students allowed during testing;
 - (d) The accommodation guidelines for students with disabilities; and
 - (e) Accessibility guidelines for students with limited English proficiency.
- Students must provide photo identification before taking a competency test.
- A competency test that is part of a course may be taken twice. If the test is failed a second time, the person must retake the course before any additional tests are administered.
- Training program and instructor must provide a certificate or transcript of completion of training to all learners that successfully complete the entire course; Keep a copy of long-term care worker certificates on file for six years, and give the original certificate to the student.

- Classroom facilities must be accessible to students and provide adequate space for learning activities, comfort, lighting, lack of disturbance, and tools for effective teaching and learning such as white boards and flip charts. Appropriate supplies and equipment must be provided for teaching and practice of caregiving skills in the class being taught.
- Testing sites must provide adequate space for testing, comfort, lighting, and lack of disturbance appropriate for the written or skills test being conducted. Appropriate supplies and equipment necessary for the particular test must be provided.

Written Test Guidance

The written competency test is designed to be completed within one hour; however, accommodations can be made for those needing additional time.

Instructor Procedures for Written Testing

Before and during the test:

- 1. Provide ample space so learners cannot see each other's papers.
- 2. Have learners remove all papers and manuals off their work areas.
- 3. Remove all training posters, flip charts, erase white boards, etc.
- 4. There should be no breaks during the testing period. An exception for an individual learner's needs is left to the instructor.
- 5. The test is not open book and learners cannot use notes.
- 6. If a learner is suspected of cheating, he/she should be told to stop the test and give it to the instructor. The learner will not receive credit for any portion of the class.
- 7. Review testing policies and general aspects of the test with learners. Advise learners that instructor assistance during testing is limited to clarification only.

Grading the Written Test

Score the tests using the answer sheet provided. Each answer sheet provides information on value (points) assigned to each question. Follow these closely. Tests should not be graded in the presence of learners.

Passing Scores

Learners must score 80% or higher to successfully pass the exam.

Testing Learners with Limited English Proficiency and/or Learning Needs

The following are options to accommodate learners who have limited English proficiency and/or learning needs:

- 1. Language-to-language dictionary
- 2. Oral test, where you read the test questions and either record the learner's answers word-for-word or have the learner record his/her own answers
- 3. Extra time to complete the test

Learners may not use interpreters for testing.

When Learners Do Not Pass the Written Test

Learners who do not pass the written test may take the current written alternate test. The alternate test should not be retaken immediately. The learner should study the materials before retaking the alternate written test. If a learner fails the alternate test, he/she must take the course again.

Challenge Test

There is no challenge test for this course.

Issuing a DSHS Training Certificate

The DSHS training certificate documents that the learner has

- 1. Successfully completed the course and
- 2. Received a passing score on the written exam

Only DSHS approved instructors may sign the DSHS training certificate.

Evaluations

Evaluations help you to gather information from the learners to measure training effectiveness. The most difficult part of an evaluation may include graciously accepting valuable criticism. Evaluations should be given with encouragement to be honest and provide constructive feedback.

- Each learner should complete the DSHS evaluation form.
- Encourage and remain open to honest feedback. Encourage learners that there will be no repercussion for responses and responses will remain anonymous.
 - o Evaluation forms can be of great assistance to you as an instructor and can enable you to provide feedback, give you information on your strengths in teaching the program, as well as areas that may be fine-tuned to improve or adapt. Review these after class.
 - o Evaluations may also provide additional information to the state curriculum developers to improve future versions of the training.
- Provide an envelope or folder for learners to discreetly place evaluations when they are complete.
- Review evaluations after the course. Use the feedback to (1) consider for improvements in future classes and/or (2) communicate information to DSHS for improvements in future versions of the training course materials.

Resources

Academy of Nutrition and Dietetics. Retrieved 2020 from https://www.eatright.org/

American Academy of Dermatology Association. Diabetes: 12 warning signs that appear on your skin. Retrieved 2020 from https://www.aad.org/public/ diseases/a-z/diabetes-warning-signs

American Academy of Family Physicians. Encouraging Patients to Change Unhealthy Behaviors with Motivational Interviewing. Retrieved 2020 from https://www.aafp.org/

fpm/2011/0500/p21.html

American Academy of Family Physicians. FPM Journals. Encouraging Patients to Change Unhealthy Behaviors with Motivational Interviewing. May-June 2011. Retrieved 2020 from https://www.apa. org/topics/resilience

American Diabetes Association (2019) Nutrition Therapy for Adults with Diabetes or Prediabetes: A Consensus Report.

Retrieved 2020, from https://care.diabetesjournals.org/ content/42/5/731

American Diabetes Association. Diabetes Care Journal. Standards of Medical Care in Diabetes, 2020. Section 9 (page 106): https://care.diabetesjournals.org/ content/diacare/suppl/2019/12/20/43.Supplement_1. DC1/Standards_of_Care_2020.pdf

American Diabetes Association. Diabetes Spectrum. Polypharmacy in Elderly Patients with Diabetes.

Oct 2002. Retrieved 2020 from https://spectrum. diabetesjournals.org/content/15/4/240

American Diabetes Association. DKA. Ketoacidosis & Ketones.

Retrieved 2020 from https://www.diabetes.org/diabetes/ complications/dka-ketoacidosis-ketones

American Diabetes Association. What Can I Eat?

Retrieved 2020 from https://www.diabetes.org/blog/ what-can-i-eat

American Diabetes Association. (2017) The Use of Language in Diabetes Care and Education.

Retrieved 2020, from https://care.diabetesjournals.org/ content/40/12/1790

American Diabetes Association. (2017) Diabetes and Aging: Unique Considerations and Goals of Care. Retrieved 2020, from https://care.diabetesjournals.org/ content/40/4/440

American Diabetes Association. Food for Thought.

2019 Consumer Nutrition One Pager. Retrieved 2020 from https://www.diabetes.org/sites/default/ files/2019-10/ADV_2019_Consumer_Nutrition_One%20 Pager.pdf

American Diabetes Association. Kidney Disease (Nephropathy)

Retrieved 2020 from https://www.diabetes.org/diabetes/ complications/kidney-disease-nephropathy

American Diabetes Association. Medication Management. Your health care team.

Retrieved 2020 from https://www.diabetes.org/diabetes/ medication-management/your-health-care-team

American Diabetes Association. Mental Health.

Retrieved 2020 from https://www.diabetes.org/diabetes/ mental-health

American Diabetes Association. Nutrition.

Retrieved 2020 from https://www.diabetes.org/nutrition

American Diabetes Association. Statistics about diabetes.

Retrieved 2020 from https://www.diabetes.org/resources/ statistics/statistics-about-diabetes

American Diabetes Association. Stroke.

Retrieved 2020 from https://www.diabetes.org/diabetes/ complications/stroke

American Diabetes Association. The cost of diabetes.

Retrieved 2020 from https://www.diabetes.org/resources/ statistics/cost-diabetes

American Diabetes Association. Understanding Type 2 Diabetes.

Retrieved 2020 from https://www.diabetes.org/diabetes

ARS Model: Essential Communication Skills.

Retrieved 2020 from https://www.fpntc.org/sites/default/ files/resources/2017-10/fpntc_oars_model_2016.pdf

Association of Diabetes Care & Education Specialists. 5 effective communication strategies to implement this national diabetes month.

Nov 06, 2019. Retrieved 2020 from https:// www.diabeteseducator.org/news/perspectives/ aade-blog-details/adces-perspectives-on-diabetescare/2019/11/06/5-effective-communication-strategiesto-implement-for-national-diabetes-month

Association of Diabetes Care & Education Specialists. Sexuality and Diabetes.

Retrieved 2020 from https://www.diabeteseducator.org/ docs/default-source/legacy-docs/_resources/pdf/general/ Sexual_health_tipsheet.pdf

BioMed Central Ltd. Springer Nature. Health and Justice Journal. (2017) Action steps using ACEs and trauma-informed care: a resilience model.

Retrieved 2020, from https://healthandjusticejournal. biomedcentral.com/articles/10.1186/s40352-017-0050-5

Blue Knot Foundation. Fact sheet for health professionals working with complex trauma.

Retrieved 2020 from https://www.blueknot.org.au/ Portals/2/Fact%20Sheets%20Info/Fact_Sheet_Health_ Practitioners.pdf

Blue Knot Foundation. National Centre of Excellence for Complex Trauma.

Blue Knot Foundation fact sheet for health professionals working with complex trauma. Retrieved 2020 from https://www.blueknot.org.au/Portals/2/Fact%20 Sheets%20Info/Fact_Sheet_Health_Practitioners.pdf

BMJ Journals. Brockie, Elm and Walls.

(2018) Examining protective and buffering associations between sociocultural factors and adverse childhood experiences among American Indian adults with type 2 diabetes: a quantitative, community-based participatory research approach. Retrieved 2020 from https:// bmjopen.bmj.com/content/8/9/e022265

BMJ open.

Examining protective and buffering associations between sociocultural factors and adverse childhood experiences among American Indian adults with type 2 diabetes: a quantitative, community-based participatory research approach. Retrieved 2020 from https://bmjopen.bmj. com/content/8/9/e022265

Care Path. Motivational Interviewing: Tips for engaging patients with diabetes 2 diabetes.

Retrieved 2020, from http://together2goal.org/assets/ PDF/JJ/motivationalInterviewing.pdf

CDC National Diabetes Prevention Program. PreventT2 – A proven program to prevent or delay Type 2 diabetes. Handouts-Ready_Set_Quit

Centers for Disease Control and Prevention (CDC) (July 2015) Motivational Interviewing: How and Why It Works for People With Diabetes.

Retrieved 2020, from https://www.youtube.com/ watch?v=AYBOgX30238

Centers for Disease Control and Prevention (CDC). Diabetes.

Retrieved 2020, from https://www.cdc.gov/media/ presskits/aahd/diabetes.pdf

Centers for Disease Control and Prevention (CDC). Prediabetes Risk Test.

Retrieved 2020, from: https://www.cdc.gov/diabetes/ prevention/pdf/Prediabetes-Risk-Test-Final.pdf

Centers for Disease Control and Prevention. CDC National Diabetes Prevention Program.

PreventT2 – A proven program to prevent or delay Type 2 diabetes. Quick Guide Handout

Centers for Disease Control and Prevention. Diabetes and Your Feet.

Retrieved 2020 from https://www.cdc.gov/diabetes/ library/features/healthy-feet.html

Centers for Disease Control and Prevention. Diabetes Press kit.

Retrieved 2020 from https://www.cdc.gov/media/ presskits/aahd/diabetes.pdf

Centers for Disease Control and Prevention. Violence Prevention.

Adverse Childhood Experiences (ACEs). Retrieved 2020 from https://www.cdc.gov/violenceprevention/acestudy/ index.html

Centers for Disease Control and Prevention. National Diabetes Prevention Program.

Retrieved 2020 from https://www.cdc.gov/diabetes/ prevention/index.html

Centers for Disease Control and Prevention. Smoking and Diabetes.

Retrieved 2020 from https://www.cdc.gov/diabetes/ library/features/smoking-and-diabetes.html

Centers for Disease Control and Prevention. Smoking and Diabetes. 50th Anniversary Resource.

Retrieved 2020 from https://www.cdc.gov/tobacco/ data_statistics/sgr/50th-anniversary/pdfs/fs_smoking_ diabetes_508.pdf

Centers for Disease Control and Prevention. Tips from Former Smokers. Smoking and Diabetes.

Retrieved 2020 from https://www.cdc.gov/tobacco/ campaign/tips/diseases/diabetes.html

Centers for Disease Control and Prevention. Tips from Former Smokers. Bill B.'s Story.

Retrieved 2020 from https://www.cdc.gov/tobacco/ campaign/tips/stories/bill.html#bills-videos

Centers for Disease Control and Prevention. Violence Prevention. Preventing Adverse Childhood Experiences.

Retrieved 2020 from https://www.cdc.gov/ violenceprevention/acestudy/fastfact.html?CDC_AA_ refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevent ion%2Fchildabuseandneglect%2Faces%2Ffastfact.html

Centers for Disease Control and Prevention. National Diabetes Prevention Program. Participant Training Guide.

Retrieved 2020 from https://www.cdc.gov/diabetes/ prevention/pdf/t2/T2-Participants-Combined.pdf

Debt.org. The Emotional Effects of Debt.

Retrieved 2020 from https://www.debt.org/advice/ emotional-effects/

Department of Health. Diabetes Data Supplement. December 2019.

Retrieved 2020 from https://www.doh.wa.gov/Portals/1/ Documents/Pubs/140-222-DiabetesDataSupplement2019. pdf

Diabetes Association of Atlanta. ADDE 7 Self-Care

Behaviors. Self-Care Behaviors – Healthy Eating. Retrieved 2020, from http://diabetesatlanta.org/aade-7-self-care-behaviors/

Diabetes Care (2018) Adverse Childhood Experiences and the Risk of Diabetes: Examining the Roles of Depressive Symptoms and Cardiometabolic Dysregulations in the Whitehall II Cohort Study. Retrieved 2020 from https://care.diabetesjournals.org/ content/diacare/41/10/2120.full.pdf

Diabetes Self-Management. The power of positivity for diabetes management.

Retrieved 2020 from https://www. diabetesselfmanagement.com/managing-diabetes/ emotional-health/the-power-of-positivity-for-diabetes-

management/

Diabetes Self-Management. What you need to know

about UTIs. Retrieved 2020 from https://www. diabetesselfmanagement.com/blog/what-you-need-toknow-about-utis/

Diabetes UK. Childhood trauma triggers immune system changes that could explain adult type 2 diabetes, study finds.

Retrieved 2020 from https://www.diabetes.co.uk/ news/2015/jun/childhood-trauma-triggers-immunesystem-changes-that-could-explain-adult-type-2diabetes,-study-finds-98876523.html

Diabetes UK. Guide to diabetes. Vegetarian diets and diabetes.

Retrieved 2020 from https://www.diabetes.org.uk/guideto-diabetes/enjoy-food/eating-with-diabetes/vegetariandiets

Diabetes UK. Guide to diabetes. Talking about your diabetes.

Retrieved 2020 from https://www.diabetes.org.uk/guideto-diabetes/emotions/talk-about-feelings

Diabetes UK. Low Carb Diet.

Retrieved 2020 from https://www.diabetes.co.uk/diet/ low-carb-diabetes-diet.html

Diabetes UK. Mediterranean Diet.

Retrieved 2020 from https://www.diabetes.co.uk/diet/ mediterranean-diet.html

Diabetes UK. Polyphagia – Increased Appetite.

Retrieved 2020 from https://www.diabetes.co.uk/ symptoms/polyphagia.html

Diabetes UK. Chapter 1 – Communication and Engagement.

Retrieved 2020 from https://www.diabetes.org.uk/ professionals/resources/shared-practice/psychologicalcare/emotional-health-professionals-guide/chapter-1communication

Diabetes UK. Extreme Tiredness (Fatigue).

Retrieved 2020 from https://www.diabetes.co.uk/ symptoms/extreme-tiredness.html

Diabetes UK. Vegan diet.

Retrieved 2020 from https://www.diabetes.co.uk/diet/ vegan-diet.html

Diabetes Voice. Global perspectives on diabetes. (2019) Mediterranean diet ranked first for diabetes.

Retrieved 2020, from https://diabetesvoice.org/en/ caring-for-diabetes/mediterranean-diet-ranked-first-fordiabetes/

DOH, DSHS, HCA. (2019, December). Diabetes Data Supplement.

Retrieved 2020, from https://www.doh.wa.gov/Portals/1/ Documents/Pubs/140-222-DiabetesDataSupplement2019. pdf

DSHS Mental Health, Level 1 – Capable Caregiving for Caregivers Specialty Training.

DSHS Person Centered thinking & Practices Curriculum

DSHS. Traumatic Brain Injury, Level 1 – Capable Caregiving for Caregivers Specialty Training.

Everyday Health. Why does type 2 diabetes make you feel so tired?

Retrieved 2020 from https://www.everydayhealth.com/ type-2-diabetes/why-does-type-2-diabetes-make-you-feeltired/

Food Remedies. Macronutrients and Blood Sugar Regulation.

https://food-remedies.com/macronutrients-blood-sugar/

Foundation for Healthy Generations: Health, safety and resilience, foundations for health equity – neuroscience epigenetics ACEs Resilience

Glaucoma Research Foundation. Glaucoma Facts and Stats.

Retrieved 2020 from https://www.glaucoma.org/glaucoma/glaucoma-facts-and-stats.php

Graveling and Frier Clinical Diabetes and Endocrinology. Driving and Diabetes: problems, licensing restrictions and recommendations for safe driving.

Retrieved 2020, from https://clindiabetesendo. biomedcentral.com/track/pdf/10.1186/s40842-015-0007-3

Harvard Health Publishing. Harvard Medical School. Comparison of the Healthy Eating Plate and USDA's MyPlate.

Retrieved 2020 from https://www.health.harvard.edu/ plate/comparison-of-healthy-eating-plate-and-usdamyplate

Harvard Health Publishing. Harvard Medical School. The sweet danger of sugar.

Retrieved 2020 from https://www.health.harvard.edu/ heart-health/the-sweet-danger-of-sugar

Harvard School of Public Health. The Nutrition Source. Carbohydrates and Blood Sugar.

Retrieved 2020 from https://www.hsph.harvard.edu/ nutritionsource/carbohydrates/carbohydrates-and-bloodsugar/

Harvard School of Public Health. The Nutrition Source. Healthy Eating Plate.

Retrieved 2020 from https://www.hsph.harvard.edu/ nutritionsource/healthy-eating-plate/

Harvard School of Public Health. The Nutrition Source. Healthy Eating Pyramid.

Retrieved 2020 from https://www.hsph.harvard.edu/ nutritionsource/healthy-eating-pyramid/ Harvard School of Public Health. The Nutrition Source. What you should eat. Protein. Retrieved 2020 from https://www.hsph.harvard.edu/ nutritionsource/what-should-you-eat/protein/

Harvard University Dining Services. The food literacy project. Food Pyramids: What should you really eat? Retrieved 2020, from https://cdn1.sph.harvard.edu/ wp-content/uploads/sites/30/2012/10/healthy-eatingpyramid-huds-handouts.pdf

Health Affairs. Eve Rittenberg. (January 2020). To Treat My Patient, I Had To Understand Her Trauma. Retrieved 2020 from https://www.healthaffairs.org/doi/ full/10.1377/hlthaff.2019.00422

Health Innovation Network, South London. What is person-centered care and why it is important?

Retrieved 2020, from https://healthinnovationnetwork. com/system/ckeditor_assets/attachments/41/what_is_ person-centred_care_and_why_is_it_important.pdf

Healthline. Diabetes Thirst. The Reason You Feel so Parched.

Retrieved 2020 from https://www.healthline.com/ health/diabetes/diabetes-thirst

Healthline. The Effects of Diabetes on Your Body.

Retrieved 2020 from https://www.healthline.com/health/ diabetes/effects-on-body#1

Healthline. What you should know about diabetic ketoacidosis.

Retrieved 2020 from https://www.healthline.com/health/ type-2-diabetes/ketoacidosis

Healthline. What You Should Know about Dry Mouth and Diabetes.

Retrieved 2020 from https://www.healthline.com/health/ diabetes/dry-mouth-diabetes#symptoms

Helpguide. Choosing Healthy Protein.

Retrieved 2020 from https://www.helpguide.org/articles/ healthy-eating/choosing-healthy-protein.htm

Homelesshub. Motivational Interviewing.

diabetesblog/diabetes-and-nutrition

Retrieved 2020 from https://www.homelesshub.ca/ resource/motivational-interviewing-open-questionsaffirmation-reflective-listening-and-summary

Incontrol Nutrition. (March 8, 2020) How do protein, fat and carbs affect my blood sugar levels? Retrieved 2020, from https://incontrolnutrition.net/

125

KidsHealth from Nemours. What is Cholesterol? Retrieved 2020, from https://kidshealth.org/en/kids/ cholesterol.html

Let Laughter Lower Your Blood Sugar. Trisha

Porretti. Retrieved 2020, from http://www.pens.org/ PENS%20Documents/PENS%202017/Handouts/Saturday_ April_29_2017/KN%20LetLaughterLowerYourBloodSugar. pdf

Mayo Clinic. Diseases and Conditions. Diabetes and depression.

Retrieved 2020 from https://www.mayoclinic.org/ diseases-conditions/diabetes/expert-answers/diabetesand-depression/faq-20057904

Mayo Clinic. Diseases and Conditions. Diabetes diagnosis and treatment.

Retrieved 2020 from https://www.mayoclinic.org/ diseases-conditions/type-2-diabetes/diagnosis-treatment/ drc-20351199

Mayo Clinic. Diseases and Conditions. Diabetes Insulin and weight gain.

Retrieved 2020 from https://www.mayoclinic.org/ diseases-conditions/diabetes/in-depth/insulin-andweight-gain/art-20047836

Mayo Clinic. Diseases and Conditions. Diabetes prevention.

Retrieved 2020 from https://www.mayoclinic.org/ diseases-conditions/type-2-diabetes/in-depth/diabetesprevention/art-20047639

Mayo Clinic. Diseases and Conditions. Diabetes symptoms.

Retrieved 2020 from https://www.mayoclinic.org/ diseases-conditions/diabetes/in-depth/diabetessymptoms/art-20044248

Medical News Today. What is the link between blurry vision and diabetes.

Retrieved 2020 from https://www.medicalnewstoday. com/articles/310894

Medical News Today. When to see a doctor.

Retrieved 2020 from https://www.medicalnewstoday. com/articles/319683#when-to-see-a-doctor

MedlinePlus. Diabetes eye exams.

Retrieved 2020, from https://medlineplus.gov/ency/ patientinstructions/000323.htm

MedlinePlus. Definitions of Health Terms: Nutrition. Retrieved 2020, from https://medlineplus.gov/

Retrieved 2020, from https://medlineplus.gov/ definitions/nutritiondefinitions.html

MedlinePlus. How to prevent diabetes.

Retrieved 2020, from https://medlineplus.gov/ howtopreventdiabetes.html

Motivational Interviewing. Understanding Motivational Interviewing.

Retrieved 2020, from https://motivationalinterviewing. org/sites/default/files/understanding_mi_aug_2019.pdf

My health explained. How to communicate with someone living with diabetes.

Retrieved 2020 from https://www.myhealthexplained. com/diabetes-information/diabetes-articles/how-tocommunicate-with-someone-living-with-diabetes

National Association of Nutrition and Aging Services. Food Safety.

Retrieved 2020, from http://www.nanasp.org/node/148

National Association of Nutrition and Aging Services. Malnutrition.

Retrieved 2020, from http://www.nanasp.org/node/146

National Center for Biotechnology Information. Activities of Daily Living.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/ books/NBK470404/.

National Center for Biotechnology Information. Diabetes and depression.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4476048/

National Center for Biotechnology Information. Enhancing Motivation for Change in Substance Abuse Treatment. Chapter 3, Motivational Interviewing as a Counseling Style.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/ books/NBK64964/

National Center for Biotechnology Information. How Patients with Type 2 Diabetes Mellitus Respond to Motivational Interviewing.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3686502/

National Center for Biotechnology Information. Low carbohydrate diets and Type2 Diabetes: What is the Latest Evidence.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4674467/

National Center for Biotechnology Information. Macronutrient composition and food form affect glucose and insulin responses in humans.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC5852764/

National Center for Biotechnology Information. Making Eye Health a Population Health Imperative. Retrieved 2020 from https://www.ncbi.nlm.nih.gov/ books/NBK402367/

National Center for Biotechnology Information. Mediterranean Diet and Diabetes: Prevention and Treatment.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4011042/

National Center for Biotechnology Information. Polypharmacy in Type 2 Diabetes Mellitus: Insights from an Internal Medicine Department.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC6723949/ (Aug 3, 2019)

National Center for Biotechnology Information. Role of Self-care in management of diabetes mellitus.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3599009/

National Center for Biotechnology Information. Trauma-Informed Care in Behavioral Health Services. Chapter 3, Understanding the Impact of Trauma. Retrieved 2020 from https://www.ncbi.nlm.nih.gov/ books/NBK207191/

National Center for Biotechnology Information. Urinary Tract Infections in Patients with Type 2 diabetes Mellitus: Review of Prevalence, diagnosis and management.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4346284/

National Center for Biotechnology Information. Vegetarian Diets and the Risk of Diabetes.

Retrieved 2020 from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC6153574/

National Council for Behavioral Health. Trauma-Informed Care.

Retrieved 2020 from https://www.thenationalcouncil. org/areas-of-expertise/trauma-informed-behavioralhealthcare/

National Council for Behavioral Health. Traumainformed, Resilience-oriented Care.

Retrieved 2020 from https://www.thenationalcouncil.org/ consulting-services/trauma-informed-resilience-orientedcare/

National Institute of Dental and Craniofacial Research. Diabetes: Dental Tips.

Retrieved 2020 from https://www.nidcr.nih.gov/sites/ default/files/2019-03/diabetes-dental-tips.pdf

National Institute of Diabetes and Digestive and Kidney Disease. Diabetes, Heart Disease and Stroke. Manage your diabetes ABCs.

Retrieved 2020 from https://www.niddk.nih.gov/healthinformation/diabetes/overview/preventing-problems/ heart-disease-stroke

National Institute of Diabetes and Digestive and Kidney Disease.

Retrieved 2020 from https://www.niddk.nih.gov/healthinformation/diabetes/overview/preventing-problems/ heart-disease-stroke

National Institute of Diabetes and Digestive and Kidney Disease. Diabetes, Heart Disease and Stroke. Retrieved 2020 from https://www.niddk.nih.gov/healthinformation/diabetes/overview/preventing-problems/ heart-disease-stroke

National Institute of Diabetes and Digestive and Kidney Disease. Health Information, Diet and Nutrition. Retrieved 2020 from https://www.niddk.nih. gov/health-information/diet-nutrition

National Institute on Aging. Diabetes in older people. Retrieved 2020 from https://www.nia.nih.gov/health/ diabetes-older-people

National Library of Medicine. Odgegaard (2006) Trans fatty acids, insulin resistance, and type 2 diabetes. Retrieved 2020 from https://pubmed.ncbi.nlm.nih. gov/16958313/

National Library of Medicine. Hayashi Takashi. (2006) Laughter regulates gene expression in patients with type 2 diabetes.

Retrieved 2020 from https://pubmed.ncbi.nlm.nih. gov/16361876/

Nebraska Medicine. Diabetes Self Care Behaviors. Retrieved 2020 from https://www.nebraskamed.com/ diabetes/self-care-behaviors

Old Ways cultural food traditions. Mediterranean Diet. Retrieved 2020, from https://oldwayspt.org/ traditional-diets/mediterranean-diet

Prevent T2. Ready, Set, Quit.

Retrieved 2020 from https://www.diabetesnc.com/wpcontent/themes/dnc/assets/downloads/1218/Handouts-Ready_Set_Quit.pdf

Social Work Today. Behavioral Health Brief: Advancing Trauma-Informed Approaches and Resilience.

Retrieved 2020 from https://www.socialworktoday.com/ archive/ND17p32.shtml

Sugar Association. What is sugar.

Retrieved 2020 from https://www.sugar.org/sugar/whatis-sugar/

Trauma Informed Care Training Center. Trauma informed and behaviors.

https://traumainformedcaretraining.com/the-rightquestions-for-trauma-informed-care/

Trauma-Informed Care Implementation Resource Center. What is Trauma-Informed Care?

Retrieved 2020 from https://www.traumainformedcare. chcs.org/what-is-trauma-informed-care/

U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. 2015-2020 Dietary Guidelines.

Retrieved 2020, from https://health.gov/our-work/ food-nutrition/2015-2020-dietary-guidelines/guidelines/ appendix-2/

U.S. Food & Drug Administration. How to Understand and use the Nutrition Facts Label.

Retrieved 2020 from https://www.fda.gov/food/newnutrition-facts-label/how-understand-and-use-nutritionfacts-label

University of California San Francisco. Prevention Science Department of Medicine. Center of Excellence for Transgender Health.

https://prevention.ucsf.edu/transhealth

University of Oregon Youth Transition Program. Some key points about OARS-Plus.

Retrieved 2020 from https://ytp.uoregon.edu/sites/ ytp2.uoregon.edu/files/OARS%20Plus%20Help%20 Document%20in%20PDF.pdf

USDA/ERS. What people know and do not know about nutrition. Joanne F. Guthrie.

Retrieved 2020 from https://www.ers.usda.gov/webdocs/ publications/42215/5842_aib750m_1_.pdf?v=0

Washington State Health Care Authority. Traumainformed approach.

Retrieved 2020 from https://www.hca.wa.gov/about-hca/ trauma-informed-approach-tia

Web MD. Diabetes.

Retrieved 2020 from https://www.webmd.com/diabetes/ diabetes

Web MD. Digestive disorders.

Retrieved 2020 from https://www.webmd.com/digestivedisorders/digestive-disorders-gastroparesis#1

Web MD. How can Diabetes affect the heart and blood vessels.

Retrieved 2020 from https://www.webmd.com/diabetes/ qa/how-can-diabetes-affect-the-heart-and-blood-vessels

Web MD. Protein in Urine (Proteinuria).

Retrieved 2020 from https://www.webmd.com/a-to-z-guides/proteinuria-protein-in-urine#1

Web MD. Veganism for people who have diabetes.

Retrieved 2020 from https://www.webmd.com/diabetes/ veganism-for-people-who-have-diabetes

Web MD. What are fats.

Retrieved 2020 from https://www.webmd.com/diabetes/ qa/what-are-fats

Web MD. What friends should know about diabetes.

Retrieved 2020 from https://www.webmd.com/diabetes/ ss/slideshow-diabetes-what-friends-should-know



DSHS 22-1859 (6/21)