



Caring for residents with diabetes

Diabetes is a common affliction for the elderly. The disease, which affects roughly 24 million Americans, changes the way the human body uses food and warrants special attention from CNAs due to the dangers these changes pose to diabetic residents.

There are two types of diabetes, with **type II diabetes** (formerly known as adult-onset diabetes) being far more prevalent in the general population and in SNFs.

This issue of **CNA Training Advisor** will explain both types of diabetes and the effects they have on those with the disease. It will also cover the four areas of **treatment** for diabetics: diet, exercise, medication, and monitoring. Each treatment is aimed at reducing a diabetic's risk of other serious health disorders and complications.

In addition, CNAs will learn about the potentially **life-threatening conditions** associated with diabetes and how to recognize the **signs and symptoms** that prelude a diabetic emergency.

Have a good day of training, and stay tuned for next month's issue of **CNA Training Advisor**, which will cover the MDS 3.0.

Hypo- vs. hyper-

The terms hypoglycemia and hyperglycemia describe the level of sugar in an individual's blood. As one could guess from the two prefixes, they mean the opposite of each other. But which means what? It's important for CNAs to develop a method of quickly recalling the difference. One recommendation: Think hypo- is low.

Questionnaire answer key

- | | | | | |
|------|------|------|------|-------|
| 1. a | 3. a | 5. d | 7. c | 9. d |
| 2. c | 4. b | 6. b | 8. a | 10. b |

PROGRAM PREP

Program time

Approximately 30 minutes

Learning objectives

Participants in this activity will learn how to:

- Describe the differences between type I and type II diabetes
- Assess the four areas of diabetes treatment
- Manage diabetic emergencies
- Recognize the symptoms of high and low blood sugar

Preparation

- Review the material on pp. 2–4
- Duplicate the **CNA Professor** insert for participants
- Gather equipment for participants (e.g., an attendance sheet, pencils, etc.)

Method

1. Place a copy of **CNA Professor** and a pencil at each participant's seat
2. Conduct the questionnaire as a pretest or, if participants' reading skills are limited, as an oral posttest
3. Present the program material
4. Review the questionnaire
5. Discuss the answers

Tips and tools for CNA training

Looking for more information about CNA training? Sign up to receive the **LTC Nursing Assistant Trainer**, a free biweekly e-newsletter that addresses all of your training needs. The **LTC Nursing Assistant Trainer** provides training tips on nursing measures, best practices, and other crucial aspects of job training for CNAs. This free e-newsletter gives you valuable information and tools to help you conduct efficient, innovative training for every CNA in your facility.

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CARING FOR RESIDENTS WITH DIABETES

Diabetes is a disease that changes the way a person's body uses food. It affects the level of sugar in the blood. Extra sugar harms the blood vessels and other organs in the body over time. Diabetes can cause great damage before any symptoms appear.

When a person eats, his or her body digests the food and turns it into sugar, or glucose. In a normal, healthy person, an organ called the pancreas produces insulin, a hormone. Insulin helps the body's cells use glucose to produce energy. The cells use this energy to keep the body healthy.

When a person has diabetes, either the pancreas does not produce enough insulin or the body does not use its insulin effectively. The cells cannot turn sugar into energy, and the sugar builds up in the blood. The cells are starved for energy, and the blood carries dangerously high levels of sugar that the body cannot use.

There are two main types of diabetes:

- **Type I** diabetes is the result of the pancreas not producing enough insulin to properly control an individual's blood sugar levels. Those suffering from type I diabetes typically require insulin shots daily. This type was previously known as insulin-dependent diabetes mellitus or juvenile-onset diabetes because it was the most prevalent type of diabetes found in people under age 18.

Breaking the ADL Code

Don't let inaccurate ADL scoring hinder your reimbursement under the MDS 3.0. Use this comprehensive, 20-minute video to train your entire nursing team—CNAs, RNs, and MDS coordinators—on the new ADL documentation requirements under the MDS 3.0.

Familiar scenarios illustrate the ADL coding changes, provide concrete examples of each level of scoring, and walk CNAs and RNs through the correct ways to code the four late-loss ADLs. In addition, MDS coordinators will discover how to tabulate the ADL scores of each resident to come up with the final ADL codes, which ultimately determine reimbursement.

The DVD includes a set of valuable tools that you can download and distribute to your staff, including:

- A 10-question comprehensive quiz to test your nursing staff's retention and understanding of the video's content
- An achievement certificate to document training
- CMS' ADL self-performance algorithm
- A flow sheet for CNAs to document ADLs
- A list of definitions related to ADLs and the MDS 3.0

For more information about Breaking the ADL Code: A Team Approach to MDS 3.0 Documentation, visit www.hcmarketplace.com/prod-8756.

- **Type II** diabetes is characterized by high levels of sugar in the blood, often due to the body not using insulin effectively. This type was previously called non-insulin-dependent diabetes mellitus or adult-onset diabetes.

Nine out of 10 cases of diabetes are type II. This type of diabetes usually occurs in people over age 45 who are overweight and/or physically inactive. It can be treated by diet, exercise, or oral medications. However, at times it also requires insulin injections.

Four areas of treatment

The goal of treatment for diabetes is to keep the individual's blood sugar as close to normal as possible. A high level of sugar in the blood over a long period of time increases an individual's risk of the following:

- Stroke
- Heart disease
- Kidney failure
- Stomach disease
- High blood pressure
- Eye disease, loss of vision, or blindness
- Nerve damage, with pain or loss of feeling in hands, feet, legs, or other parts of the body

There are four parts to diabetic treatment:

1. Diet
2. Exercise
3. Medication
4. Monitoring

Anyone who cares for a diabetic person should be familiar with the medicine, exercise regimen, monitoring program, and diet that the individual is supposed to follow.

1. Diet

There is no one diet designed for every diabetic person, but there are guidelines to help with food choices. These guidelines are similar to the kind of eating that is healthy for anyone.

A resident with diabetes should make an effort to eat:

- Few sugary foods
- Less fat, especially saturated fat and cholesterol (e.g., butter, margarine, oils, etc.)
- A variety of fresh fruits, vegetables, lean meats, and fish
- Just enough calories to stay at a healthy weight

Many people think that diabetics are not allowed to eat sugar of any kind—this is no longer the case. Sugar is a carbohydrate, like bread or potatoes, and can be part of a diabetic's food plan. However,

CARING FOR RESIDENTS WITH DIABETES

most sugary foods provide calories without many vitamins or minerals and are often high in fat. It is better to eat more foods rich in nutrients (e.g., vegetables and fruits) and few fatty, sweet foods (e.g., ice cream and candy).

Dietitians sometimes teach diabetics and those who care for them to use exchange lists. These lists are a way to plan meals by putting foods in a category (e.g., a starch exchange or fruit exchange). The diabetic person eats only a certain number of each type of exchange every day, as ordered by a doctor or established by a dietitian.

2. Exercise

Exercise usually lowers blood sugar and may help insulin's effectiveness in diabetic residents. It helps control weight, improves blood flow, and strengthens the heart. People with diabetes should exercise at least three times per week. Before a diabetic starts a new exercise program, a doctor should approve the program, as well as how often and how long the diabetic exercises.

It is important that a diabetic not develop low blood sugar while exercising. Because the body burns sugar during exercise, the diabetic should fuel up with a piece of fruit or half of a sandwich within an hour before starting any exercise. It is also a good idea for diabetics to check their blood sugar level before exercising. If the blood sugar reading is less than 70, they should eat something and wait for the blood sugar level to come up over 70 before exercising.

If a diabetic feels faint, sweaty, dizzy, or confused while doing any activity, he or she should stop and immediately drink fruit juice or a sweet (not diet) soft drink. Diabetics must respond quickly when feeling this way because it means that their blood sugar level is too low.

3. Medication

Diabetics might receive insulin shots or take pills by mouth. Only a doctor can decide what medication and how much of it a diabetic

should receive. It can be very dangerous to change a diabetic's medication in any way unless a doctor orders the change. Diabetics must receive the exact amount of medicine their doctor has ordered, at the times the doctor has ordered. Timing of medicine and meals is important to prevent low blood sugar.

4. Monitoring

Close monitoring of a diabetic's blood sugar level is one of the best ways for him or her to prevent long-term complications from the disease. Diabetics check their blood sugar by pricking a finger with a needle and testing a drop of blood with a special blood glucose meter. The meter, also called a monitor, gives a number that tells the level of glucose in the blood. These monitors must be kept clean and should be checked periodically for accuracy.

Most diabetics need their blood sugar level tested at least once per day. This is usually done in the morning before breakfast. Depending on the type of diabetes, the person's age, and other factors, the individual may need to be tested as many as five times per day. Sometimes insulin dosages are adjusted depending on the person's blood sugar level.

A doctor must set the acceptable ranges for each person. When a blood glucose level falls outside of the range set by the doctor, staff

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CARING FOR RESIDENTS WITH DIABETES

must notify him or her as soon as possible. If assisting a diabetic with monitoring his or her blood sugar, be sure that you know the resident's correct range.

Another important part of monitoring is watching the feet and skin of a diabetic resident. Diabetes can turn a small sore or wound into a large problem. Any sores, blisters, and wounds found on a resident's feet and skin must always be reported to a supervisor or a nurse.

Diabetic emergencies

Diabetes can cause both long- and short-term problems. Blood sugar that is too low or extremely high can rapidly lead to unconsciousness and even death. You must know the symptoms of both conditions and how to respond.

► **Hypoglycemia** means that the level of sugar in the blood is too low. Too much insulin or oral medication, too much exercise, not eating enough food, or drinking alcohol can cause this condition. Hypoglycemia can cause strokes and heart attacks in the elderly. This problem is also called insulin reaction or insulin shock.

The following symptoms of low blood sugar occur suddenly and without warning:

- Shaking, nervousness
- Feeling sweaty and cold
- Pale, clammy skin
- Feeling weak, tired, and drowsy
- Sudden hunger
- Blurred or double vision
- Tingling of hands, lips, or tongue
- Confusion
- Personality change
- Slurred speech
- Loss of consciousness
- Dizziness, staggering walk
- Nausea and headache
- Fast heartbeat
- Itching

The elderly and those with other diseases and disabilities can be especially sensitive to low blood sugar, and it can be very dangerous for

them. Any diabetic who suddenly shows any of the symptoms listed above must receive immediate attention.

In order to treat hypoglycemia, the diabetic could do any of the following:

- Drink a sweet drink (e.g., sweetened coffee or tea, orange juice, or soda)
- Eat sugar, corn syrup, or candy, or take glucose tablets

► **Hyperglycemia** means that the level of sugar in the blood is too high. This condition can be caused by infections, illness, stress, injury, not enough insulin, not enough exercise, or eating too much food. Very high levels of sugar can cause coma and death.

The following symptoms of high blood sugar occur gradually and worsen over time:

- Extreme thirst/hunger
- Rapid weight loss
- Frequent urination
- Change in vision
- Dry skin and mouth
- Fatigue, drowsiness
- Nausea
- Fruity-smelling breath
- Very deep, gasping breath
- Unconsciousness

A CNA needs to report any of the first seven symptoms in the list above to a supervisor or a nurse as soon as possible. Fruity-smelling breath, deep gasping breathing, and unconsciousness are emergency symptoms that can quickly lead to death. Call 911 or access emergency medical care at once. ■

Questions? Comments? Ideas?

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CARING FOR RESIDENTS WITH DIABETES

Mark the correct response.

Name: _____

Date: _____

1. Diabetes can cause great damage before any symptoms appear.
 - a. True
 - b. False
2. In a normal, healthy person, an organ called the _____ produces insulin, a hormone that helps the body's cells use glucose to produce energy.
 - a. stomach
 - b. small intestine
 - c. pancreas
 - d. gallbladder
3. Those suffering from _____ diabetes typically require insulin shots daily.
 - a. type I
 - b. type II
 - c. both types of
 - d. neither type of
4. Type II diabetes is characterized by low levels of sugar in the blood.
 - a. True
 - b. False
5. A high level of sugar in the blood over a long period of time increases an individual's risk of each of the following, except:
 - a. Heart disease
 - b. Stomach disease
 - c. Loss of vision or blindness
 - d. Hearing impairment
6. Diabetics are not allowed to eat sugar of any kind.
 - a. True
 - b. False
7. If uninhibited by other conditions, able residents with diabetes should exercise at least _____ time(s) per week.
 - a. one
 - b. two
 - c. three
 - d. four
8. Diabetes can turn a small sore or wound into a large problem, so sores, blisters, and wounds on a diabetic resident's skin must always be reported to a supervisor or a nurse.
 - a. True
 - b. False
9. Each of the following is a symptom of low blood sugar, except:
 - a. Pale, clammy skin
 - b. Sudden hunger
 - c. Slurred speech
 - d. Trouble sleeping
10. _____ means that the level of sugar in the blood is too high.
 - a. Hypoglycemia
 - b. Hyperglycemia