

Meeting 10



Prevent Complications

Welcome!



Welcome to meeting 10 of Partners in Care. I am so happy to see you again.

We've talked about the things we need to do to keep glucose in balance and prevent diabetes complications. Strategies we have talked about include:

- Monitoring blood sugar,
- Knowing the numbers your blood sugar and A1c should be to prevent complications,
- Why it is important to eat more fiber, fruits and vegetables, and less fat and sugar,
- Why we need to be physically active,
- The importance of taking medicines that are prescribed by our health care providers, and
- The importance of talking to our health care providers and asking questions about diabetes and staying in balance.

Today we will talk about some of the complications that diabetes can cause and ways to prevent them from happening. Before we get started on meeting 10, let's listen to what Uncle Tommy does to prevent diabetes complications.

Uncle had not been able to spend much time with Kaipo lately, so today he decided to take him to his doctor's appointment. "I think you and I need to do something together. Why don't you come with me tomorrow to my appointment and then we can walk to the park to play soccer. How does that sound?" Uncle asked. "Sure!" Kaipo said with a big smile.

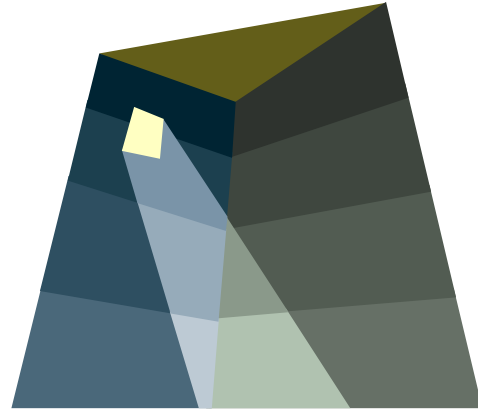


Uncle had an eye appointment so he picked up Kaipo early the next morning. "What do you have to do at the clinic, Uncle?" asked Kaipo. Uncle replied, "I just have to get my eyes checked to make sure that everything is still okay. A couple of years ago I had some problems with my eyes and I needed to have it taken care of. If I didn't, the doctor told me that I could lose my eyesight. I didn't want that to happen, so I had laser treatment done."

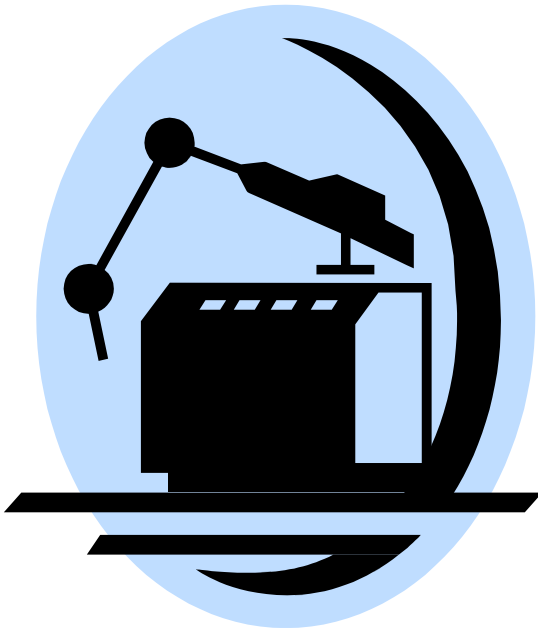


"A laser! What kind of laser? Did it hurt?" asked Kaipo.

Uncle laughed and said, “Let me explain it. If you cut a small hole in a piece of paper and then let the sunlight shine through it, you get a stream of light that shines through the hole. Well, a laser is like that.



It is a stream of light that they shine in my eye that takes care of the problem that I had. Now I go about twice a year and have it checked to make sure that my eyes are okay. Lowering my blood sugar has helped a lot too. I feel better now and I’m healthier,” said Uncle.



Uncle’s appointment did not take long, so Kaipo and Uncle spent almost half the day at the park.

“Thanks Uncle for going to the park with me today and for always taking the time to talk to me to help me understand things,” Kaipo said as he and Uncle Tommy walked to the car to go home.

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Eyesight



Uncle Tommy had laser eye surgery to fix the problem he had with his eyes. Today we are going to talk about how you can protect your eyes, kidneys, teeth, and nervous system from diabetes problems.

Let's think about eyesight first. When you have good vision, what things do you enjoy seeing the most? Uncle Tommy enjoys watching Kaipo play and learn.

There are many reasons why we need to take care of our eyes. People with diabetes can keep their eyes healthy by keeping glucose in balance.

If blood glucose stays high over time, a person may have eye problems. There are three serious eye problems a person with high blood glucose can have:

1. Retinopathy - problems in the back of the eye (the retina),
2. Cataracts, and
3. Glaucoma

Let's talk about Retinopathy first.



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Retinopathy

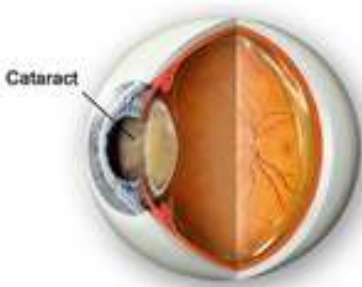


There are many small blood vessels that line the inside of our eyes. High glucose and blood pressure out of balance can cause the blood vessels in the eye to break and bleed into the retina of the eye. This is called retinopathy, which is a serious eye problem. Retinopathy can cause blurry vision and even blindness.

Treatment for Retinopathy

To treat retinopathy, laser surgery is done. Laser surgery is a strong beam of light that is aimed into the back of the eye (retina) to shrink the blood vessels that are too large. It can also close blood vessels that are leaking. Laser surgery cannot restore vision that has already been lost, but it can keep it from getting worse.

Cataracts



Another serious eye problem is cataracts.

Cataracts are the clouding of the lens of the eye. It causes blurry, dull vision. You may know people who have had cataracts that have gone through surgery and have very good vision now. Cataracts can also happen to some people who do not have diabetes.

Treatment for Cataracts

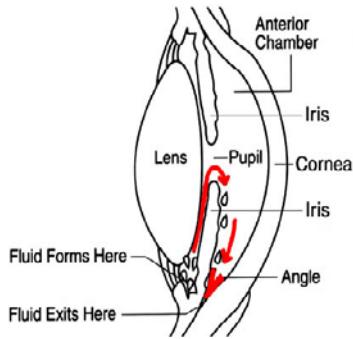
To treat cataracts, surgery is performed to replace the clouded lens with either a contact lens or a lens implant. This is a very successful surgery that restores lost eyesight.

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Glaucoma



Treatment for Glaucoma



Preventing Eye Problems



The third serious eye problem is glaucoma.

Glaucoma means that there is an increase of fluid pressure inside the eye. The pressure causes eye nerve damage and loss of vision. People have trouble seeing things out to the sides (sometimes called tunnel vision). Glaucoma can also happen to people who do not have diabetes.

To treat glaucoma, medicine in the form of eye drops is used to lower the pressure in the eye.

Have you experienced any eye problems? If so, what kind of treatment did you have?

All of these serious eye problems can be prevented or treated. By keeping your glucose in balance, these serious eye problems can be prevented or postponed.

Here are some things that can be done to take care of and protect eyesight.

1. Keep glucose in balance.
2. Keep your blood pressure at 130/80 or lower.
3. Have a dilated eye exam once a year:
 - Your eye doctor will use drops to make the black center of your eyes (pupil) get bigger so that s/he can see the small blood vessels at the back of the eye. This exam does not hurt and is not the same exam that you get for eyeglasses.

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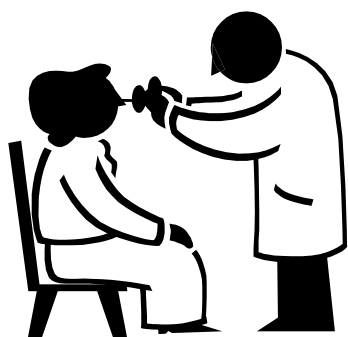
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4. Do not smoke. If you smoke now, quit smoking. Talk to your provider about ways to quit smoking.

5. Visit the eye doctor right away if you have any of these problems:

- Blurry vision
- Seeing double, spots, or rings around lights
- One or both eyes hurt
- Feel pressure in your eye
- Cannot see things out to the sides
- Have trouble reading



6. Get new glasses when your glucose is in balance. People can have blurring of their vision when their glucose changes a lot over time. This is not eye damage. Eyes focus differently when a glucose reading is 100 most of the time, compared to when it is 200 or 300 most of the time. Some people need different glasses if glucose changes.

It takes about 4 weeks for your eyes to adjust to new glucose levels. Get your eyes checked for glasses when your glucose is about the same for 4 weeks in a row.



Finding serious eye problems early can save a person's eyesight. People with diabetes need to get an eye exam at least once every year. Eye damage has no symptoms in the early, most treatable stage. Getting treatment right away can save eyesight.



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Teeth and Gums: Protect Your Smile



Symptoms of gum infection

Picture in your mind the beautiful smile of a child. That picture in your mind makes you smile too, doesn't it? We should all be able to smile whenever we want to, but sometimes smiles are hidden behind a hand, a book, or something else. One of the most common reasons for this is because people may have problems with their teeth and gums.

Did you know that diabetes increases the risk for teeth and gum problems?

High glucose can lead to infections of the gums and bones that hold the teeth in place. Like all infections, gum infections can cause glucose to rise, making the problem worse. Without treatment, teeth may become loose and fall out.

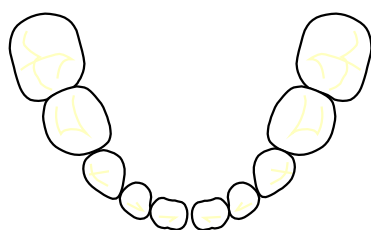
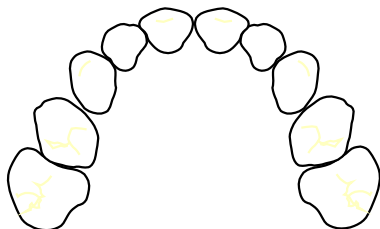
It is important to be aware of early signs or symptoms of a gum infection so that you can take care of this right away. If you have a gum infection, you may see:

- Gums bleed when you brush or floss your teeth,
- Swollen, red, or tender gums,
- Gums that have pulled away from your teeth making teeth look longer,
- Bad breath or a bad taste in your mouth,
- Teeth that hurt when you chew,
- Feeling twinges in your teeth when you are not eating, or
- Your teeth moving.



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Healthy Teeth and Gums

The best ways to protect the teeth and gums are to:

- ❖ Brush and floss your teeth twice a day using a soft toothbrush,
- ❖ Brush your gums and tongue with a soft toothbrush,
- ❖ Do not smoke or chew tobacco,
- ❖ Keep your blood sugar in balance,
- ❖ See your dentist every 6 months or more often if recommended,
- ❖ Tell your dentist that you have diabetes, and
- ❖ Have your teeth cleaned every 6 months, and

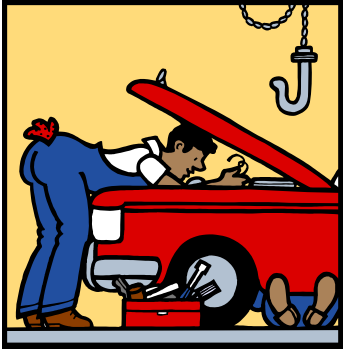




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Protect Your Kidneys



Nephropathy



Symptoms



Do you know what the kidneys are for?

The kidneys filter out harmful wastes from the body to clean the blood. Clean blood leaves the kidneys and goes back into the bloodstream through a vein. The wastes pass out of the body as urine.

To understand how the kidneys work, just think of the oil filter in the car. The oil filter keeps the oil clean and protects the engine so that a car runs smoothly. It catches the dirt and grime that is outside, and keeps it from getting into the engine. The kidneys do the same thing for the body so we can run smoothly.

Kidney damage is called nephropathy (neh-FROP-uh-thee). Diabetes can cause kidney disease by damaging the small blood vessels of the kidneys that filter out the waste. Over time, high blood sugar and blood pressure can damage these blood vessels.

If the kidneys are damaged, they cannot filter out wastes as well. Kidney disease then causes protein to spill into the urine and waste products to build up in the blood.

Bladder or kidney infections can also cause damage. If you have a bladder or kidney infection you may:

- Urinate more often than usual,
- Feel like you need to urinate but are not able to,
- Have a burning feeling when you urinate, or
- Have back pain.



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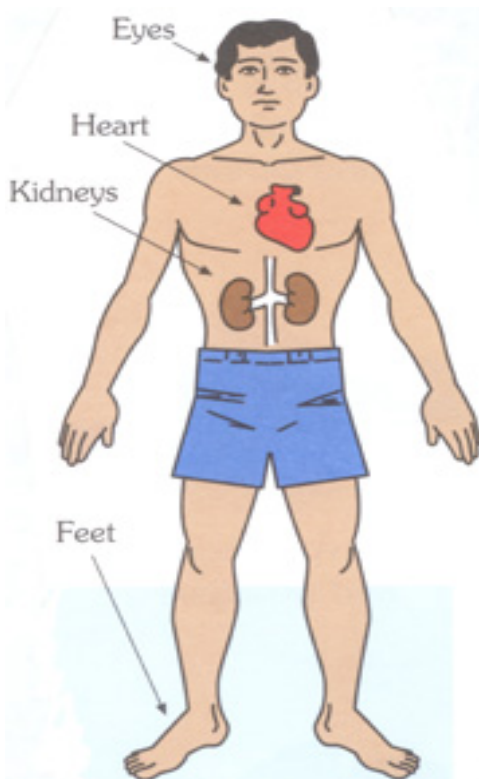
Treatment



Eating healthy foods and medicine can treat early kidney damage. But when the kidneys do not work right anymore, a person then has to have their blood filtered to remove the waste products that have built up in the blood. There are three ways to treat kidneys that are not working the way they should:

1. A person can have dialysis done with a machine several times a week at a dialysis center,
2. Dialysis can be done at home with a special solution put into the abdomen (belly area), called peritoneal (PAIR-ih-toe-NEE-uhl) dialysis, or
3. A person can have a kidney transplant.

Prevent Kidney Damage



Protecting your kidneys is important!

Here are some things that you can do to protect your kidneys:

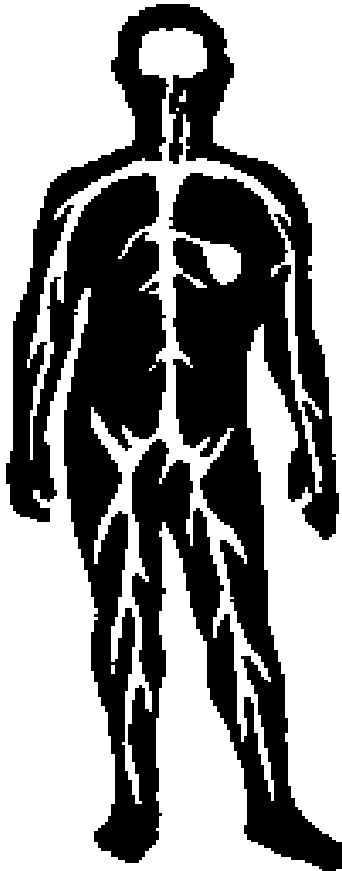
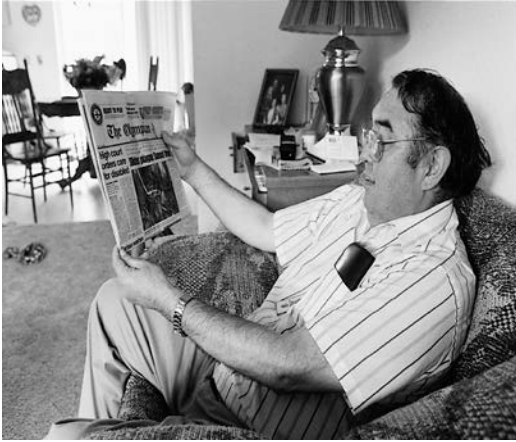
- Keep blood sugar and blood pressure in balance,
- Have your kidneys checked once a year with a blood test. A special urine test called microalbumin (MY-kroh-al-BYOO-min) should also be done. If the microalbumin is too high, medicine can be taken to lower it, and
- Have bladder or kidney infections treated right away.



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Nerve Damage: Protect Your Sense of Touch



Let's think of the things that you touch everyday. Now think what it would be like if you couldn't feel those things. It would make the world around you very different, wouldn't it?

Nerves carry messages back and forth between the brain and other parts of the body. We have nerves throughout our entire body.

Did you know that over time, high blood sugar can damage the blood vessels that bring oxygen to some nerves? High blood sugar can also damage the coating on the nerves.

Nerve damage, known as neuropathy (noo-ROP-uh-thee), can cause a number of problems, such as numbness, tingling, or shooting pains in your arms, hands, legs, or feet. There are other kinds of nerve damage that can happen that you might not know about.



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Nerves that go to the stomach, intestines and other parts of the digestive system can also be affected by high blood sugar. When nerves to the stomach are damaged, the muscles of the stomach do not work the way they should and food may stay in the stomach too long.



Nerve damage can also cause sexual problems with some people. These problems may be caused by high blood sugar or the medicine a person is taking.

No one should be embarrassed to talk about these kinds of problems because sexual problems are more common than you might think.

If having sex is a problem, people should talk to their health care provider about it. There are things that can be done to fix the problem.

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Prevent Nerve Damage



Nerves also go to the heart, bladder, blood vessels, and throughout the head and face. Damage to these nerves can cause serious problems too. If you have one or more of the problems mentioned, you may have some nerve damage from diabetes. Tell your doctor about the problem.

There are ways to prevent nerve problems. The best way to get help is to talk to your provider.

Here are some ways you can protect your body from nerve damage:



- Keep your blood sugar as close to normal as possible,
- Limit the amount of alcohol you drink,
- Don't smoke,
- Take care of your feet,
- Tell your doctor about any problems you have with hands, feet, legs, stomach, bowels, or bladder, problems when you have sex, low blood sugar, and dizziness,
- Have your provider check for nerve damage, such as the monofilament test on your feet.

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Let's Review

The path to staying healthy is not always an easy one, but it is worth it! You have this information so that you can better understand diabetes and how to stay in balance.

To stay healthy and prevent complications, it is important to:

1. Get and keep blood sugar in balance: (A1c lower than 7)
2. Get eyes checked by your doctor at least once a year
3. Get a dental exam at least once year
4. Have your kidneys checked with a blood test once a year
5. Eat less fat and sugar
6. Take medicine, if prescribed
7. Be physically active most days of the week
8. Talk to your provider if you are feeling depressed or having sexual problems
9. Don't smoke or chew tobacco

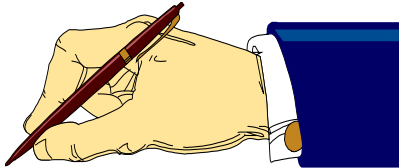


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Set a Goal!



Let's take a few minutes now to write down one goal that you plan to work on this week to stay healthy and prevent complications. Remember all that we have talked about today.

Thank you for coming today! I look forward to seeing you at our next meeting.

Please take a few minutes to give us feedback about the meeting on the next page.



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**Review of Meetings 1-9, Questions,
Dictionary, Brochures**

Stay Healthy! Prevent Complications



By asking questions, you become an active partner in your health care. Here are a few questions that you may want to ask your provider.

- Can I have an appointment for a dilated eye exam?
- What are the results of my eye exam?
- What should I do if I begin to notice a problem with my eyes?
- Can I have an appointment for a dental exam?
- What should I do to take care of my teeth and gums?
- What is the lab result of the microalbumin test to check my kidneys?
- If I am depressed, whom can I talk to here at the clinic about it?
- Can a support group be started for those of us dealing with diabetes?

These are just a few of the questions you may have about staying healthy. If you should have questions, write them down and take them with you to your next clinic visit. Remember, your provider will be happy to answer your questions and work with you as a partner in your health care.

Dictionary
Meeting 10: Prevent Complications!

Term	Meaning of the Term
A1c	A blood test that measures the average blood glucose for the last 3 months.
ACE Inhibitors	A type of drug used to lower blood pressure. Studies also show that it may also help prevent or delay kidney disease in people with diabetes.
Cataracts	Clouding of the lens of the eye.
Depression	Feeling of sadness, gloom that may last longer than normal and may affect daily activities.
Dialysis	A way to remove waste from the blood when the kidneys can no longer do the job.
Glaucoma	An eye disease that may cause increased pressure within the eye. Glaucoma can cause impaired vision and blindness.
Gum Disease (Periodontal Disease)	Damage to the gums. People who have diabetes may be more likely to have gum disease than people who do not have diabetes.
Kidneys	Two organs in the lower back that clean waste and poisons from the blood. The kidneys are shaped like two large beans and are the body's filter.
Laser Surgery	Using a special strong beam of light to heal a damaged area. A person with diabetes might be treated with a laser beam to heal blood vessels in the eye.
Microalbumin	A special lab test that checks urine for early signs of kidney disease. This test should be done one time every year.

Nephropathy	Disease of the kidneys caused by years of high blood glucose (sugar).
Neuropathy	Disease of the nervous system.
Provider	A partner in your health care who helps you to stay healthy.
Retinopathy	A disease of the small blood vessels in the retina of the eye.