Diabetes-Facing it Head On!
Going for the 3 Increases: Increase in Health, Increase in Happiness & Increase in Energy

Strategies for Success in Health Management
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What is Type 2 Diabetes?

- Type 2 diabetes strikes people of all ages.
- Its early symptoms are subtle.
- About one out of three people with type 2 diabetes don't know they have it.
- This chronic condition thwarts the body's ability to use the carbohydrates in food for energy.
- The result is elevated blood sugar.
- Over time, this excess sugar raises the risk for heart disease, loss of vision, nerve and organ damage, and other serious conditions.
Why Diabetes Needs to be Taken Seriously

- Diabetes is a major cause of heart disease & stroke
- Diabetes is the seventh leading cause of death in the United States
- Type 2 diabetes accounts for 90% to 95% of all diagnosed cases of diabetes
- Overall, the risk for death among people with diabetes is about twice that of people of similar age who don’t have diabetes
Health Risks of Diabetes

Diabetes with elevated blood sugars can cause:

- Eye damage & Blindness
- Heart disease
- Nerve & blood vessel damage
- Kidney disease
- High blood pressure is a common complication of diabetes
- Gum disease is also more common in people with diabetes
Diabetes and Depression

- According to the CDC
- Depression is twice as common among people with diabetes as among other people

But it's not clear
- which comes first, the depression or the diabetes
- or that one causes the other
What Causes Diabetes

- Diabetes is caused by problems related to the hormone insulin, which helps turn blood sugar (glucose) into energy.
- With type 2 diabetes, a problem called insulin resistance happens when the body's cells can’t use insulin properly, and the pancreas makes an abundance to overcome the increase in blood glucose levels.
- When this happens, the pancreas can gradually lose its ability to make insulin.
- The increased amount of sugar in the blood can damage nerves and blood vessels. Chronically elevated blood sugars lead to such complications as heart disease, stroke, and kidney disease.
What Are the Symptoms of Diabetes?

Common symptoms of diabetes include:

- Excessive thirst & appetite
- Increased urination (sometimes as often as every hour)
- Unusual weight loss or gain
- Fatigue
- Nausea, perhaps vomiting
- Blurred vision
- In women, frequent vaginal infections
- In men and women, yeast infections
- Dry mouth
- Slow-healing sores or cuts
- Itching skin, especially in the groin or vaginal area
Symptom Differences Between Diabetes Type 1 and Diabetes Type 2

- People with type 2 diabetes often do not have any symptoms - Symptoms in type 1 diabetes usually come on much more suddenly and are often severe
- An estimated 27% of all people with diabetes (not just type 2 diabetes) don't know they have it
- When symptoms do occur, they are often ignored because they may not seem serious
- Type 2 diabetes was once called adult-onset diabetes & the vast majority of people with type 2 diabetes are adults.
- Type 2 diabetes can develop at any age & children are being diagnosed with it more frequently.
Diabetes Symptom: Acting Drunk or Losing Consciousness

- Your brain can be affected if your sugar level drops too low
- Low glucose can cause you to stagger, slur words, or even pass out
- You can wear a medical bracelet or necklace that lets people know you have diabetes
- If your blood sugar gets too low, take in about 15 to 20 grams of a simple carb which may help (half a cup of orange juice, 2 tablespoons of raisins, or a tablespoon of sugar)
Diabetes Symptom: Excessive Urination

If your blood sugar is too high you may find yourself:

- Waking at night to urinate and urinating larger amounts than usual can mean something is wrong.
- It's normal to release as much as 84 ounces of urine a day—that's about 2 liters. Since you probably don’t measure your urine output at home, you may have to figure out whether you're making too much of it.
Diabetes Symptom: Excessive Thirst

- Being thirstier than usual can be brought on by warm weather, salty foods, or an increase in your workout routine.
- But your thirst can also be brought on also by too much urination.
- You need to continue to drink when you're thirsty. If you're dehydrated, though, you may need medical care.
- Thirst may mean your body is signaling you to drink more.
- Urinating and drinking more than a gallon a day is a signal that something is wrong.
Diabetes Symptom: Losing weight while eating normally

- When your glucose is high, you may be losing calories in your urine
- Your body is making you hungry and thirsty to keep up with the lost fluids and calories
- You need to see your doctor to discuss your diet or have your medications adjusted accordingly
Diabetes Symptom: Extreme Fatigue

- If you are still exhausted after 7 to 8 hours of sleep per night is a problem
- Glucose is your main source of energy, but if it's too high, your body isn’t able to use it properly
- You need to see your doctor to discuss your diet or have your meds adjusted accordingly
- If you can’t get out of bed, feel dizzy, or nauseated, call 911
Diabetes Symptom: Slow Healing

- Small cuts, bloody gums, infections & sores usually heal in a few days, but white blood cells, which fight infection, are dependent on glucose levels being right. They can become slow to respond to infections when your glucose is high.
- You need to inspect your skin twice a day, paying special attention to your feet.
- Nerve damage from diabetes can prevent you from feeling irritations that can develop into sores.
- If you find wounds that don’t heal in a few days, see your doctor to discuss your diet or have your meds adjusted.
Diabetes Symptom: Eye problems

- When your blood sugar shifts, it can make the lens of your eye shrink or swell, causing the vision to blur or create little spots called floaters.
- This in itself is usually not a big concern, but you should see an ophthalmologist to be sure. If part of your normal range of vision is missing, call 911.
Other Diabetes Symptoms to Watch For

- Shoulder pain
- Nausea
- Discomfort in arms, jaw, or chest
- People with diabetes have a greater risk of heart disease, so these symptoms should not be ignored, even if they go away and come back
- Also take note of shortness of breath, fainting, or breaking out in a cold sweat. Call 911 if you have any of these symptoms.
Keep on Track Dealing with Diabetes

● Testing every day is the best way to track your blood sugar
● Ask your medical team what your target blood sugar range should be
● Find out what to do if your blood sugar lands in the high or low range or when you should test your urine for ketones
● You should call your doctor right away if your urine contains ketones.
People with Type 2 Diabetes Need to:

- Watch their weight and maintain a healthy, balanced diet
- In moderation, and as part of a healthy meal plan, desserts or other sugary foods are not off limits
Risk Factors for Getting Type 2 Diabetes

- Obesity
- Age - being 45 & older increases your risk
- Family history
- Inactivity
- Ethnicity (people of African, Asian, Pacific Islander, American Indian, and Latino heritage have a higher risk)
- But having one or more of the risk factors doesn’t mean you’ll get type 2 diabetes.
Type 2 Diabetes can be Prevented

- Type 2 diabetes usually doesn't start suddenly
- Some people are first diagnosed with prediabetes (also known as impaired glucose tolerance or impaired fasting glucose)
- Lifestyle changes, such as weight loss if you are overweight, dietary improvements, and exercise, can often ward off full-blown diabetes
- Some people at high risk for developing type 2 diabetes can reduce their risk further by taking the drug metformin with a lifestyle change
Lifestyle Change Can Prevent Type 2 Diabetes

- In a recent study, people at high risk for type 2 diabetes were put on a weight loss and physical activity plan for three years.
- Researchers found that it reduced their chances of developing type 2 diabetes by 58% and by 71% if they were age 60 or older.
Risk Factors You can Control

Health habits & medical conditions related to your lifestyle can increase the odds of developing type 2 diabetes:

- Being overweight, especially at the waist
- A sedentary lifestyle
- Smoking
- A diet high in red meat, processed meat, high-fat dairy products & sweets
- Abnormal cholesterol & blood fats, such as HDL "good" cholesterol lower than 35 mg/dL &/or triglyceride level over 250 mg/dL
Having gestational diabetes when you're pregnant puts you at higher risk for developing type 2 diabetes later on.

Women who give birth to a baby weighing over 9 pounds are also at risk.

Having a history of polycystic ovary syndrome can also cause insulin resistance that can lead to diabetes.
How Does Insulin Work?

- In a healthy person, insulin helps turn food into energy in an efficient manner.
- The stomach breaks down carbohydrates from food into sugars, including glucose.
- Glucose then enters the bloodstream, which stimulates the pancreas to release insulin in just the right amount.
- Insulin, a hormone, allows glucose to enter cells throughout the body, where it is used as fuel.
- Excess glucose is stored in the liver.
Type 2 Diabetes: Metabolism Mishaps

- In type 2 diabetes cells cannot absorb glucose properly
- That means glucose levels in the blood become elevated
- If you've developed a condition called insulin resistance, the body makes excess insulin, but the muscle, liver, and fat cells do not use or respond properly to the insulin
- With long-standing uncontrolled type 2 diabetes, the pancreas will reduce the amount of insulin it produces
Managing Diabetes: Diet

- Controlling blood sugar levels by changing diet & losing excess weight can also cut risk of complications
- People with type 2 diabetes should carefully monitor carbohydrate consumption & keep the amounts of carbs in meals fairly consistent, as well as total fat & protein intake, and reduce calories
- Ask your doctor for a referral to a registered dietitian to help you with healthy choices and an eating plan that will work for you.
Managing Diabetes: Exercise

- Routine exercise, such as strength training or walking, improves the body's use of insulin and can lower blood sugar levels in people with type 2 diabetes.
- Being active also helps reduce body fat, lower blood pressure, and protect against heart disease.
- People with type 2 diabetes should try to get 30 minutes of moderate exercise on most days of the week.
Managing Diabetes: Stress Reduction

- Stress can cause blood pressure to rise
- Stress can also increase glucose levels in your blood as part of your "fight or flight" response
- Or you may turn to food to cope with stress
- All are bad when living with diabetes

Instead of letting stress take its toll:
- Try practicing relaxation techniques such as deep breathing, meditation, or visualization
- Sometimes talking to a friend, family member, counselor, or member of the clergy can help
- If you're still battling stress, reach out to your medical team
Managing Diabetes: Oral Medications

- When people with type 2 diabetes are unable to control blood sugar sufficiently with diet and exercise, medication may be added.
- There are many types of diabetes pills available, and they are often used in combination.
- Some work by stimulating the pancreas to make more insulin, and others improve the effectiveness of insulin, or block the digestion of starches.
- Some medications used to treat type 2 diabetes also help inhibit the breakdown of insulin.
Managing Diabetes: Insulin

- Your doctor may prescribe insulin early on in your treatment and in combination with pills.
- Insulin can also be used in people with type 2 diabetes who develop "beta-cell failure" - This means the cells in the pancreas no longer produce insulin in response to high blood sugar levels.
- In this case, insulin therapy - injections or an insulin pump - must become part of the daily routine.
New non-insulin injectable drugs are available for people with type 2 diabetes

- Pramlintide (Symlin)
- Exenatide (Byetta)
- Liraglutide (Victoza)

Whereas insulin pulls glucose into the cells, these medications cause the body to release insulin to control blood sugar levels.
Managing Diabetes: Glucose Testing

- Testing your blood glucose level will let you know how controlled your blood sugars are & if you need to take actions to change your treatment plan.

How often & when you test will be based on:

1. How controlled your diabetes is
2. Type of therapy used to control your diabetes
3. Whether you are experiencing symptoms of fluctuating sugars

Talk with your doctor to find out how often you should use a glucose meter to check your blood sugar. Some common testing times may be when waking up, before and after meals and exercise, and at bedtime.
So Are You Ready to Deal with Diabetes in Your Life?

- Our hope is that in reviewing these issues you are motivated to work on improving your approach to preventing or dealing with Diabetes in your life.
- We hope you will be willing to work on your diabetes prevention or treatment issues within the Support Services we offer here in your clinic.
- We look forward to working with you on your diabetes related issues.