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WHAT
DIABETIC PATIENTS
AND THEIR FAMILIES NEED TO KNOW

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Type 2 diabetes can have slow inception, and early signs and symptoms can be confused with signs of stress, a poor diet, or being overweight. This type of diabetes occurs when problems arise in making or using insulin, a hormone that makes it possible for cells to use glucose (also known as blood sugar) for energy.

In a nutshell, type 2 diabetes occurs when the body cannot use glucose properly, which raises the level of glucose in the blood.

The basket of tools to combat diabetes grows each year, and this publication by LECC helps you discover ways to maintain type 2 diabetes.

Whenever you visit your doctor, make sure you ask the following questions:

- What is my blood sugar goal?
- What other medical problems am I at risk of getting (due to type 2 diabetes) and why?
- What is the relationship between diabetes and the eyes, feet, kidneys, nerves, and heart disease?
- When do I need to see a doctor?
- Why must I be mindful of the wound on my feet?
- Are there lifestyle changes that might help?
- Do artificial sweeteners cause insulin resistance?
- Are there medications that might help?
- Are my children at increase risk of diabetes? And how can I protect them from this disease?
- What is the importance of diet in diabetes?

Lies you should never tell your doctor (if it applies to you):

- I check my blood sugar regularly
- I am not depressed
- I take all my medications as prescribed
- I exercise everyday
- The only supplement I take is multivitamin
- I eat healthy
- I don't smoke

It's our business to know what is going on with you to give the best treatment possible. Always share with us any updates such as sleeping troubles, issues with your feet, new job, moving houses, new medicines, planning a stressful wedding, and so on. It is also important, to be honest about your treatment plan –

- Are you taking your drugs regularly?
- Stressing less?
- Exercising more?
- Losing weight? Etc.

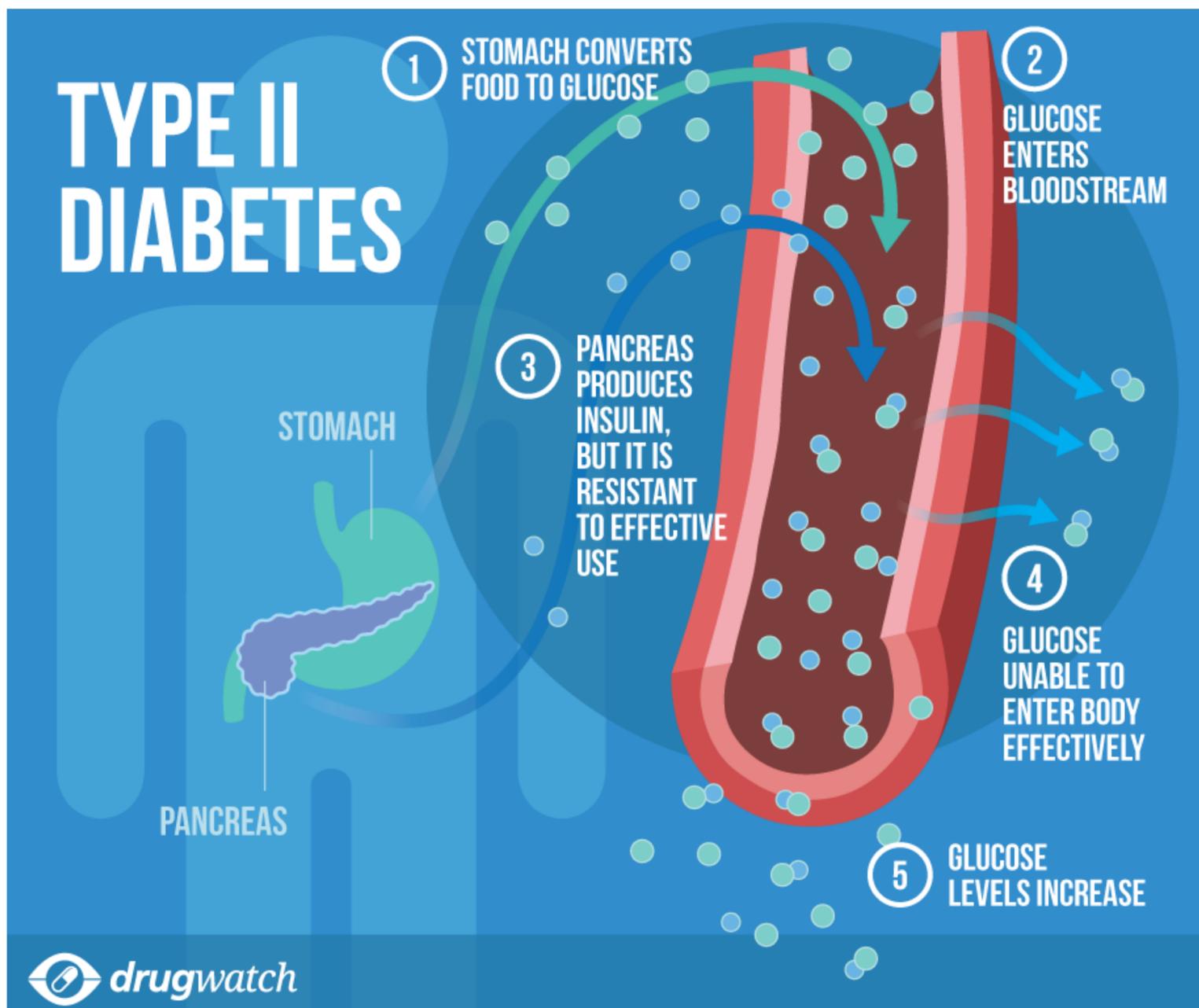
It is easy to dismiss signs and symptoms, and just say you're fine, but we can't help you if we don't know what is really going on.

When you eat, your body breaks down carbohydrates into sugar called glucose and produces a hormone called insulin that signals the body's cells to absorb glucose from the bloodstream for energy. Type 2 diabetes occurs when the body's cells do not respond to insulin well.

Since sugar (glucose) can't get into the body's cells, it builds up in your blood. This type of disease is a progressive disease, which means it can worsen over time and require higher doses of medication or multiple medications to control blood sugar.

WHAT IS TYPE 2 DIABETES

Type 2 Diabetes



When you eat, your body breaks down carbohydrates into sugar, called glucose, and produces a hormone called insulin that signals the body's cells to absorb glucose from the bloodstream for energy. Insulin, which is produced in your pancreases, helps your body use glucose. Type 2 diabetes occurs when the body's cells do not respond to insulin well.

Since sugar (glucose) can't get into the body's cells, it builds up in your blood. This type of disease is a progressive disease, which means it can worsen over time and require higher doses of medication or multiple medications to control blood sugar.

Overtime, this build up damages your blood vessels and leads to serious health problems.

This can lead to symptoms of diabetes including:

- Extreme fatigue
- Intense thirst or hunger
- Need to urinate frequently
- Blurry vision
- Pain, numbness or tingling in the hands or feet
- Tissues aren't healing wounds fast enough
- Dry itchy skin

Type 2 diabetes develops over time and can begin any time from childhood onward. It is usually triggered by family history, being overweight, and/or not getting much physical activity. It treatment usually includes a combination of weight loss (if needed), daily exercise, a healthy diet, and medications.

SIGNS AND SYMPTOMS

Type 2 Diabetes

When diagnosed with type 2 diabetes, you may have experienced some symptoms of high blood sugar, however, there are cases when the patient does not experience any signs. It is important for both groups of people to watch for signs of high and low blood sugar.

High Blood Sugar Symptoms (hyperglycemia)	Low Blood Sugar Symptoms (hypoglycemia)
Frequent urination)	Frequent sweating
Extreme thirst	Extreme hunger
Extreme fatigue	Confused thinking
Pain, numbness or tingling in hands and feet	Feeling weak or dizzy
Blurry vision	Blurry vision

Your blood sugar may rise or fall for many reasons including (but not limited to):

- Over-stress and/or get depressed
- Eat very little or too much
- Fail to take your medications as prescribed
- Become more active, or reduce physical activity
- Get sick

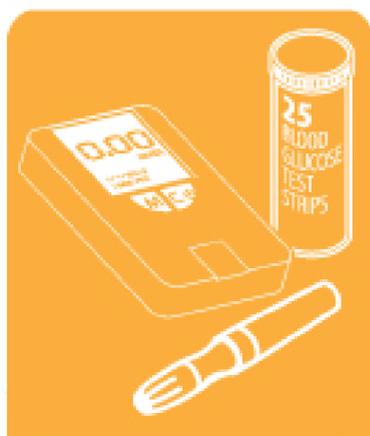
It is important to prepare for these situations by working with your doctor to manage your blood sugar. If you are noticing a lot of high or low numbers, it may be a sign that you need to change your treatment.

An important part of controlling your diabetes is monitoring your blood sugar level to see how well you are doing. This is a daily and life-long journey.

CHECKING YOUR BLOOD SUGAR

Measuring your blood sugar regularly as part of monitoring. You should test your blood sugar with a glucometer before and after meals, and before bedtime. It is always good to keep a good record of your results and share them with your doctor at every visit. This track of results is very important as it serves as a guide to identifying the effectiveness of your physical activity, stress level, medications, and food. It also shows whether your blood sugar targets are being met, as agreed with your doctor. This target usually depends on your age, how long you have had diabetes, and other medical conditions.

YOUR DIABETES EDUCATOR WILL HELP YOU LEARN:



- How to use the glucometer
- Tips for best/easiest way to monitor



- When to check your blood sugar
- What the numbers mean



- What to do if your numbers are off target



- How to record your results and keep track over time

A1C Test

An A1C test is a very important test. It is a simple average blood test that expresses the average amount of sugar in your blood over the past 2 to 3 months. The result lets you know if your blood sugar has been too high, too low or where it should be.

An A1C is a good way to see:

- If your treatment plan is working
- If your healthy choices (diet, physical activity, and so on) are paying off

We check our patient's A1C 2 to 4 times a year.

TIP! Remember, your blood sugar tests and A1C results – whether good or bad – inform us about the effectiveness of your overall diabetes treatment plan. If your results are not where they need to be, then your doctor knows it's time to make changes.

Know the Risk Factors

Part of monitoring type 2 diabetes is knowing what increases your risk of the disease.

They include (but are not limited to):

- Age: 40 years and older. The older you are, the greater your risk of diabetes
- Insulin resistance
- Obesity or being overweight
- Impaired glucose tolerance
- Blood vessel problems in the heart, brain, or legs
- High cholesterol levels (read our healthy heart publication)
- Family history of diabetes: diabetes runs in families especially Africans
- Gestational diabetes while pregnant
- Being physically inactive

If you have diabetes, it is important to treat and manage the disease as soon as possible. When diabetes is not diagnosed early and properly managed, the individual may begin to develop several diabetes-related complications including:

- Cardiovascular disease (including heart attack, stroke, narrowing of arteries, and coronary artery disease)
- Hearing impairment
- Alzheimer's disease
- Kidney damage
- Pancreatitis and pancreatic cancer
- Mortality
- Eye damage/blindness
- Amputation of limbs
- Skin problems
- High blood pressure (hypertension)
- Nerve damage (neuropathy)
- Diabetic ketoacidosis

Early detection and proper management of diabetes can greatly decrease the risk of such complications listed above.

Diabetes cannot be cured, but an effective treatment plan can help maintain good health, avoid further health complications, and keep your blood sugar on track. Eating healthy and exercising is a critical part of your treatment plan and your doctor may prescribe medications and suggest insulin.

Small and consistent changes in your daily habit can make a big difference in your overall health. It is important to make realistic goals with your doctor(s) because you cannot make all these changes at once, set a timeframe to complete your goals, keep your goals specific, and reward yourself for accomplishing goals.

Stop Smoking

Smoking is bad for your overall health. It damages your artery walls and increases your blood pressure. Therefore, quit smoking.

Make exercise a priority

Being physically active lowers blood sugar, blood pressure, and 'bad' cholesterol. The key is to start small and stay active doing what you like to do. Before increasing your physical activity it is important to talk to your doctor to make sure it is okay as not all exercise may be good for you. The safest activity is walking (for 30 minutes).

Eat Good, Control your weight

The more fat cells you have, the more insulin you need to lower your blood sugar. Losing excess weight can help to dramatically reduce your risk of complications from diabetes.

Make daily changes like adding more fruits and vegetables to every meal. One misconception about losing your weight is that you have to lose a lot for significant results, however, losing as little as 5kg can have a dramatic impact on your diabetes risk. Also, monitor your progress and discuss it with your doctor.

Here some tips on your diet:

- Eat meals that have low sodium (salt) content
- Eat a variety of fruits, vegetables, and whole grains
- Eat less fatty foods and drinks
- Limit your alcohol consumption
- Eat smaller portions spread out over the day

MEDICATION

Your doctor may prescribe medicine or insulin:

Oral medicines

Oral medications may be suggested if your pancreas can still produce insulin. They work by:

- Helping your pancreas make more insulin
- Helping insulin in your body work better
- Decreasing the amount of sugar your liver makes
- Blocking the breakdown of starches so they cannot be turned into sugar
- Preventing the breakdown of hormones that help lower blood sugar

Like your body's ability to make insulin changes, you may need to switch or take a combination of medicines to help lower your blood sugar.

Insulin

You will need insulin if your pancreas can't make or make enough. You can't take insulin by mouth because normal digestion interferes with how it works. You have to inject it with a syringe and needle, pen, or pump. There are fast and long-acting options. Your doctor will recommend the best type for you.

SPECIAL MEDICINE GUIDE

- To help your treatment succeed:
- Know your medicine treats your condition and why it's important to not miss a dose.
- Fill your prescription and get your refills on time. Ask for automatic refills or refill reminders.
- Learn everything you can about how and when to take your medicine.
- Take every dose. To help remember, Take your medicine at the same time of day you do something else, like
 - when you eat breakfast, brush your teeth
 - Use a pillbox labeled in days
 - Keep a medicine tracker or logbook (diary)
 - Use sticky notes or set reminders on your cell phone.
 - Store your medicine where you will always see it, like on your nightstand.

What keeps you from taking your medicine?

- Feeling better?
- Not seeing any benefit?
- Having side effects?
- Not remembering?
- Are costs too high?
- Too complicated?

Whether you miss your medicine every week or only once in a while, tell us. Be honest about why you aren't following your treatment plan, so we can help you.

References

1. Type 2 Diabetes, Patient Point
2. Diabetes Educator
3. Drug watch

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Available Everyday

- Adult & paediatric cardiology
- Cardio-oncology
- Interventional cardiology
- Adult & paediatric endocrinology
- Neurology & stroke care
- Neurosurgery in partnership with Barnahospital Spain
- Clinical Diet & Nutrition
- Sleep Clinic: insomnia, sleep apnea etc

Strictly by appointment

- ENT Surgery
- General Surgery
- Urology
- Haematology
- Physiology

Facilities

- Adult & paediatric ICU suites
- Coronary care unit and HDU
- Private and semi-private wards
- On-site complete diagnostics: laboratory, radiology & sonography
- Non-invasive cardiovascular lab: 4D Echo, 2D Echo, Ankle Brachial Index, Stress (treadmill) & resting ECG, 24hr BP Monitoring, 24hr ECG Holter, Doppler studies etc
- Sleep laboratory

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