



# World Diabetes Awareness Day

World Diabetes Day is a campaign that features a new theme chosen by the International Diabetes Federation (IDF) each year to address issues facing the global diabetes community. While the themed campaigns last the whole year, the day itself is celebrated on November 14th, to mark the birthday of Frederick Banting who, along with Charles Best, first conceived the idea which led to the discovery of insulin in 1922.

What is diabetes?  
Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Hyperglycaemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels.

There are two main types of diabetes:

Type 1 diabetes (T1B) usually develops in childhood and adolescence and patients require lifelong insulin injections for survival.

Type 2 diabetes (T2B) usually develops in adulthood and is related to obesity, lack of physical activity, and unhealthy diets. This is the more common type of diabetes (representing 90% of diabetic cases worldwide) and treatment may involve lifestyle changes and weight loss alone, or oral medications or even insulin injections.

Type 2 diabetes (T2D) Description  
Formerly named non-insulin-dependent diabetes mellitus (NIDDM).

Characterized by hyperglycemia due to a defect in insulin secretion usually with a contribution from insulin resistance.

Patients usually do not require lifelong insulin but can control blood glucose with diet and exercise alone, or in combination with oral medications, or with the addition of insulin.

Usually (but not always) develops in adulthood (and is on the rise in children and adolescents).

Us related to obesity, decreased physical activity and unhealthy diets.

As in T1D, patients are at a higher risk of microvascular and macrovascular complications.

Symptoms  
patients may have no symptoms at all or minimal symptoms for years before being diagnosed.

may have increased urinary frequency (polyuria), thirst (polydipsia), hunger (polyphagia), and unexplained weight loss.

may also experience numbness in extremities, pain in feet (disesthesias), and blurred vision.

may have recurrent or severe infections.

patients may present with loss of consciousness or coma but this is less common than in T1D.

Diagnosis  
Diagnosis is made by the presence of classic symptoms of hyperglycemia and an abnormal blood test.

A plasma glucose concentration  $\geq 7$  mmol/L (or 126 mg/dL) or  $\geq 11.1$  mmol/L (or 200mg/dL) 2 hours after a 75g glucose drink.

In a patient without classic symptoms, diagnosis can also be made by two abnormal blood tests on separate days.

In most settings (although it may not be available in some resource-poor settings), another test called HbA1C is done to approximate metabolic control over previous 2-3 months and to guide treatment decisions. This test can also be used to diagnose type 2 diabetes.

Some asymptomatic patients are diagnosed through "opportunistic screening" of high risk groups (at a routine medical visit, the health care provider may identify the patient as being at higher risk of diabetes and recommend a screening test).

For example, age  $\geq 45$  years of age, a BMI  $\geq 25$  kg/m<sup>2</sup> may, being of certain ethnic group or being hypertensive may prompt a screening test.

In some cases, the patient him/herself requests screening.

Treatment  
Overall aim of treatment is symptom relief and prevention or delay of complications by targeting normal blood glucose levels.

Patients treated with diet/exercise, or with addition of one or more categories of oral medications, with a combination of oral medications and insulin, or with insulin alone.

Glucometers to self-monitor blood glucose (with less frequency than with T1D).

Early detection and treatment of complications (at intervals recommended by national and international guidelines): eye exam, urine test, foot care, and specialist referral as needed.

Self-monitoring for signs/symptoms of hypoglycemia (such as hunger, palpitations, shakiness, sweating, drowsiness and dizziness) and hyperglycemia.

Patient education about diet, exercise, and foot care.

Gestational diabetes (GDM)

Description  
Characterized by hyperglycemia of varying severity diagnosed during pregnancy (without previously known diabetes) and usually (but not always) resolving within 6 weeks of delivery.

Risks to the pregnancy itself include congenital malformations, increased birth weight and an elevated risk of perinatal mortality.

Increased risk to woman of developing diabetes (T2D) later in life.

Symptoms  
Increased thirst (polydipsia) and increased urination (polyuria) are more commonly noted (although other symptoms can be present).

Because pregnancy itself causes increased urination, these symptoms are difficult to recognize as abnormal.

A larger than normal baby during pregnancy (noted on routine prenatal exam) may prompt diabetic screening.

Diagnosis  
Standard OGTT is done at 24-28 weeks after an overnight fast (fasting plasma glucose and a plasma glucose 2 hours after 75g glucose drink is done).

A 2 hour level  $\geq 7.8$  mmol/L (or 140 mg/dL) is diagnostic of gestational diabetes.

If fasting and postprandial blood sugars are elevated in the first trimester, this may indicate preexisting diabetes mellitus (which is considered a different condition, with different implications).

Treatment  
Strict metabolic control of blood glucose to lower obstetrical risks.

Patients treated with diet/exercise, with addition of oral medications, or with the addition of insulin.

Glucometers to self-monitor blood glucose.

Patient education about diet and exercise.

Patient education after delivery regarding weight loss/exercise to prevent future diabetes.

Lifelong screening for T2D as patient will be in high risk category.

- Dr. Jaysimha Reddy  
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# Cardiovascular Disease and Diabetes

**Why are people with diabetes at increased risk for CVD?**

Diabetes is treatable, but even when glucose levels are under control it greatly increases the risk of heart disease and stroke. That's because people with diabetes, particularly type 2 diabetes, often have the following conditions that contribute to their risk for developing cardiovascular disease.

**High blood pressure (hypertension)**

High blood pressure has long been recognized as a major risk factor for cardiovascular disease. Studies report a positive association between hypertension and insulin resistance. When patients have both hypertension and diabetes, which is a common combination, their risk for cardiovascular disease doubles.

**Abnormal cholesterol and high triglycerides**

Patients with diabetes often have unhealthy cholesterol levels including high LDL ("bad") cholesterol, low HDL ("good") cholesterol, and high triglycerides. This triad of poor lipid counts often occurs in patients with premature coronary heart disease.

**Obesity:** Obesity is a major risk factor and has been strongly associated with insulin resistance. Weight loss can improve cardiovascular risk, decrease insulin concentration and increase insulin sensitivity.

**Lack of physical activity**

Exercising and losing weight can prevent or delay the onset of type 2 diabetes, reduce blood pressure and help reduce the risk for heart attack and stroke.

**Poorly controlled blood sugars or out of normal range**

Diabetes can cause blood sugar to rise to dangerous levels. Medications may be needed to manage blood sugar.

**Smoking:** Smoking puts individuals, whether or not they have diabetes, at higher risk for heart disease and stroke. Learn how to kick the habit.

**The ABC treatment goals in Diabetes**

The ABC treatment goals for most people with diabetes are:

A HbA1C (blood glucose) less than 7 percent, B Blood Pressure less than 130/80 mmHg, C Cholesterol – LDL less than 100 mg/dl

**What can people with diabetes do to lower their CVD risk?**

· Reach and stay at a

healthy weight. Being overweight or obese is a risk factor for heart attack and stroke.

· Get at least 30 to 60 minutes of physical activity. Brisk walking or a similar activity most days of the week can help with weight loss and lower blood pressure.

· Eat foods that are low in saturated fats, trans fats, cholesterol, salt (sodium), and ad-

ded sugars – choose lean meats, poultry, fish, nuts (in small amounts), fatfree or lowfat milk, and milk products.

· Eat more fiber – whole grains, fruits, vegetables, and dry peas and beans.

· Stop smoking – or ask their health care team for help to quit. Smoking is one of the major risk factors associated

with heart attack and stroke.

· Take medications as directed – and ask their doctor about taking daily aspirin.

· Ask family and friends to help them manage their diabetes. This support can help people reach their goals.

- Dr. Pawan Poddar

Senior Interventional Cardiologist, Yashoda Hospitals, Malakpet

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## Diabetes and its impact on your Fertility:

Diabetes is a disease that affects millions of people and their families. WHO estimates that more than 180 million people worldwide have diabetes. Amongst the population as a whole, around 1 in 7 couples experience difficulty conceiving within the first year. As diabetes can lead to additional problems that may affect fertility, the risk of infertility is therefore likely to be higher for couples in whom atleast one of the partner has diabetes.

**Impact on male infertility**  
Diabetes causes male infertility in three ways:  
• Causes erectile dysfunction-by affecting the health of small blood vessels and lowering testosterone levels resulting in lower sex drive.  
• Reduces ejaculate volume-by affecting the small nerves that control ejaculation and by lowering testosterone levels.  
• Retrograde ejaculation, where semen backs up into the bladder, making it impossible to get to the woman's reproductive organs.

• Also, when the researchers analyzed the sperms' DNA, they found more DNA damage in the diabetes patients' sperm with more deletions in the mitochondrial DNA of diabetic men's sperm cells than those of the non-diabetic men.  
Simply put, a diabetic man who does not control his glucose levels has less of a chance of impregnating his partner and when he does the risk of miscarriage and deformities are much higher.

**Impact on female infertility**  
There are more than 200,000 new cases of Type II diabetes diagnosed every year with another 2.4% of the general childbearing population suffering from the disease but not knowing it.

In addition to keeping an embryo from implanting, glucose levels that are too high can also affect hormone levels throughout the body including the all-important estrogen, progesterone and testosterone levels needed for a pregnancy to occur. That is why glucose control is so vital to your fertility.

The reproductive period of diabetic women may be reduced due to delayed menarche (time of onset of periods) and premature menopause. During the reproductive years, diabetes has been associated with menstrual abnormalities, such as prolonged cycles and secondary amenorrhea. It was found that better sugar control and prevention of diabetic complications improves these irregularities and increases fertility rates close to those that are seen in the general population. A woman with higher than normoglycose levels can get pregnant month after month. Unfortunately, her diabetes status prevents that embryo from implanting in the uterus, causing

a miscarriage before she ever realizes she is pregnant. In this case, the diabetes isn't preventing conception, but is preventing an ongoing pregnancy. High glucose levels are reported to increase a woman's chances of miscarriage by 30-60% according to statistics released by the American Diabetes Association.

**Impact on pregnancy**  
Even when implantation does occur, there are other risks to consider:

- An increased risk of birth defects due to damage caused to embryonic cells form the high levels of glucose in the blood.
- If you have gestational diabetes, your baby's lungs tend to mature a bit later.
- A larger baby resulting in an increased incidence of c-section.
- Risk of having low sugar levels in baby after delivery.

**Controlling Your Diabetes**  
When it comes to controlling their diabetes in order to attain a healthy pregnancy, most doctors urge women to plan ahead for a pregnancy by doing the following:

- Get their weight to a normal level (the more obese you are, the harder it will be to control your glucose levels and your estrogen levels will be high that can impact fertility). This is because fat has an enzyme that converts an androgen to an estrogen.
- Get your A1C levels below 6 before attempting to get pregnant.
- Controlling your daily sugar levels for 3-6 months (the longer the better) to give your body the chance to prepare for a pregnancy.

**Target blood sugar levels during pregnancy**

Sugar levels (mg/dl)	Preexisting diabetes	Gestational diabetes
Fasting	60-99	<95
Post meal (2hr)	<140	<120
HbA1c	Less than or around 6%	

Should Diabetic Partners Try and Conceive At All?

It can be said that it is highly important to understand the risks involved in high glucose levels and fertility & by simply controlling your glucose levels and maintaining it at a normal level will reduce these risks and offer the opportunity for a safe pregnancy resulting in a healthy baby. The key to success, of course, is working with your endocrinologist and infertility specialist to ensure that your glucose levels remain stable months before trying to conceive as well as during a pregnancy. With a good plan and dedication to eating right and staying healthy, your chances of giving birth are very high, despite having diabetes.

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### Masters Homeopathy

**The only treatment for Hepatitis and Herpes**

Hepatitis  
Everyone is fearing about this virus in these days. Doctors find this Hepatitis with their examinations when the patients come to visit the doctors for other diseases. With that, they come to a decision that they are going to die. They think that the virus will not come out of the body due to which there are chances of liver damage for a long time. But truly there are medicines in home to control hepatitis. The patients will lead a happy and healthy life when they get homeo treatment without fear after the confirmation of Hepatitis. There are symptoms like hungeriness, vomiting, body pains, yellowness in urine, jaundice, herpes on skin and also uneasiness in stomach, pain in abdomen. However, it can be controlled totally after taking full time medicines by experienced homeo doctors.

Herpes simplex  
You will find some water pocks like sweat pocks on penis. With this the people will neglect that they are normal pocks. Later the pocks will become boil. Women too will witness the same kind of boils on vaginal parts with severe pain. If they ignore, it will lead to some more problems. Due to this, they will not be happy during sex and the couple gets embarrassed. Homeo treatment will show wonderful results for herpes problems. The people will suffer a lot when they take other medical treatments but with homeo treatments they will lead a happy and healthy life.

**"Sciatica is totally cured"**  
A middle-aged man came once to my clinic and asked «doctor, please give good treatment for my back pain as I have been suffering for long time. I will pay the bill whatever it is. I will be in debt to you." I asked the man to tell the details with patience. Then he told doctor, I am Narayana and native of Kurnool. I am working in a private company. Since one year I have been suffering with back pain which is gradually increasing. Now,

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it spread to the legs and feet. I am not able to move here and there and walk. I feel some electric current is passing through my body. When I consulted one doctor, he said that it is sciatica and prescribed pain killers. I am getting relief when using pain killers and it will remain after some time. Now, I came to you for permanent solution." I told him not to worry about it and said that there is permanent remedy for sciatica.

After treatment  
I gave him medicines after observing symptoms, psychological points. There is best treatment with homeo medicines for sciatica problems. Back pain can be cured completely with homeo medicines. By avoiding changes that will take place in back bone, there will be good results by giving treatment to strengthen the muscles. I advised him to visit after using medicines for one month. Then after a month, he came very happy and his face is looking joyous without pain. And he said that numbness in legs is cured. I advised him to continue full course not to discontinue medicines. After six months sciatica problem was solved. As usual he is attending work. I gave some precautionary measures not to go on bike and not to sit long time.

**You can survive even if you have HIV**  
This is a case from karimnagar Branch. He is about 30 years. He is trembling. When I asked about this problem, he said, «doctor, I belong to Jammikunta. Four years back, I had sex with a girl. I didn't expect that she has some disease. Since two months, I am suffering with fever, cough and loose motions. When I consulted doctor, he said that I have HIV. And I lost weight. There is no hope of survival. Please let me live." I said not to worry about life and took some details.

After treatment:  
During some weather changes, we can see the symptoms like cold, fever, TB infection, loose motions in some persons infected by HIV. That means if disease control system weakens, diseases can be infected. If you are strong HIV can not harm you. Homeo treatment will focus on disease control system. When he was examined it was found that the number of CD cells is 320. So, I said not to worry about and said I would start treatment. I gave him prescription and asked him to come after one month. After one month I saw a lot of change in him. He said that he was so hungry, and free from tiredness. He said he has some hopes of life. I advised him to continue medicines for one more month. Later after Examining second time, CD4 count is 710. Now he is leading a happy and normal life.

## 60% of the Cancer Patients are Above 65 Years of Age

Every cell that has life is prone to cancer. That is the reason, every living being including the plants of this creation fall prey to this malignant disease. The matured cells in our body multiply into different cells, thereby producing new cells. As the body ages, each cell goes on deteriorating and nears its extinction. As cells grow faster in young age, development is possible. As we grow up, the process of multiplication of cells slows down and the body stops developing. In old age, new cells are born only to replace the worn out cells. When this natural and regular process gets derailed, new cells start generating even when old cells are still alive, which leads to formation of tumors in the body. While some benign tumors limit to a particular area, some malignant tumors expand to other areas and tissues through blood and lymphatics are cancerous tumors. Such cancerous tumors, which expand as we grow old are helped by many factors like socialite surroundings, bad habits, weather conditions, professional reasons, pollution, lifestyle, usage of hormones, family history, certain types of virus and bacteria, fertilisers, radiation etc.

As per the survey of National Cancer Institute 60% of the newly detected cancer patients are above 65 yrs. Old and 70% of them are not surviving. The chances of contacting cancer are 10% higher in the people above 65 yrs. of age when compared with the younger ones. The older people are more prone to get all types of cancer. Especially cancers of colon, rectal, prostate, pancreas, lungs, bladder, large intestines, chest are more likely to occur as we grow old. Apart from that there are more chances that tumors may not respond to the treatment in these people. As the older people often suffers from problems like High Blood Pressure, Diabetes, Joint degeneration, Thyroid problems, Blockages in blood vessels of heart etc., these people require well designed personalized cancer treatment. Treatment for cancer patients is to

be given by taking not only their body health conditions into consideration, but also taking age, their mental, social, family and economic conditions into consideration and by giving lung, liver, cervical cancer, but confidence to them. Because of this counseling plays an important role in their treatment.

A lot of research has been done by the scientists in the direction that whether occurrence of cancer is inevitable in older people. The researches prove that there are a lot of reasons for occurrence of cancer in older people. Some of these reasons are as follows:

1. Prolonged bad habits at young age like smoking, alcohol, having sex with many
2. Reduced immunity as we grow old
3. Excessive usage of certain hormones
4. Occurrence of slow changes in cells at young age getting predominant at old age
5. Getting exposed to certain chemicals as per the profession
6. Treatment taken for other diseases

The slow changes occur in tissues due to certain habits during young and middle ages become predominant at old age. Persons having Werner Syndrome, Alzheimer's, AIDS are more prone to get cancer. Old age people having higher hormone levels in the body are more prone to get certain types of cancers. For example, women having prolonged high levels of estrogen are prone to get breast, endometrial, breast cancers. If a woman has not reached menopause even after 60 yrs. of age, then it needs an investigation. Menstruation at 9 yrs. of age, late marriage, family planning increase the risk of getting breast cancer.

Testosterone hormone levels may lead to prostate cancer. That is the reason, treatment in such cancers include hormone therapy in addition to surgery, radiation, chemo.

People cannot refrain from certain habits developed at young age in the company of friends. Smoking, alcohol, having sex with many may lead not only to cancer, but also cancer to any other part. The better to get screening tests done regularly after a certain age. Women after 35 yrs. of age need to get pap smear test to detect cervical cancer and to get mammography and self-examination to detect breast cancer after 40 yrs. of age. Similarly, men after 50 yrs. of age have to get PSA test to detect prostate cancer, liver test who have hepatitis-B positive, lungs and liver test who have the habits of smoking and alcohol for an early detection of changes.

Everyone has to have the awareness that cancer can be prevented with good food habits and good life style since young age, screening tests to detect changes in the body, treatment at an early stage



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