



GET MOVING



Dr. K D Modi
Endocrinologist, Medwin
Hospitals, Hyderabad

21st century living means that most of urban India spends 8 – 10 hrs a day, sitting behind a desk. This lack of physical activity has already been linked to the development of type 2 diabetes and cardiovascular disease. Indians also have a 'normal-weight metabolically obese' phenotype which means that despite being normal weight, we have larger waistlines. Other risk factors like smoking, alcohol, bad diets and reduced physical activity increases our risk of developing diabetes at a younger age.

There are so many benefits of being more active. Our body becomes more sensitive to insulin, our muscles utilize more glucose during and after exercise, the good cholesterol (HDL) increases while the bad cholesterol (LDL) decreases, and blood pressure reduces.

So, include about 30 to 60 min of physical activity in your daily schedule (about 2.5 hrs a week). The most effective of all exercises is the simplest – a brisk walk. On an empty stomach, either in the morning or evening, just put on a good pair of sports shoes and go out for a walk. Start slowly and gradually increase your work-out time. In fact, any aerobic activity will improve your cardio-respiratory function. So, find a friend and play badminton or tennis. But don't forget to stretch or warm-up before you begin. Even housework like sweeping, swabbing, dusting – all of these count towards making us more active. If you have to sit at your desk all day, then stand up every hour and walk around for a few minutes.

If you're diabetic, I'd recommend you avoid lifting weights and carry a juice or a quick acting carbohydrate just in case you feel hypoglycemic. Avoid exercising if it's too hot or cold. I even encourage my pregnant patients to go for a walk. If you have arthritis and find walking difficult, then at least focus on upper body exercises. In short, pick an activity you love to do, speak to your doctor before you begin, and then go out and enjoy being healthy!

YOUR DRUGS NEEDN'T SCARE YOU



DR. BIPIN SETHI
Endocrinologist, Care
Hospitals, Hyderabad

Managing diabetes is not just about controlling glucose attention needs to be paid to hypertension, lipids and when indicated the use of blood thinners, because these are of equal and in some situations greater importance. Lot of things have to be kept in mind while prescribing drugs for controlling diabetes and increasingly one is concerned not just about their efficacy but also safety.

There are two major types of diabetes Type 1 where the need for insulin is absolute and the insulin needs to be replaced with two or more injections of insulin per day and Type 2 where the insulin deficiency is of a lesser degree but there is an additional component of resistance to its action (insulin resistance). It is therefore possible to control the glucose by using oral agents which are initiated soon after the diagnosis (typically with Metformin unless not tolerated/contraindicated) along with life style changes that include diet and exercise. These act largely by addressing one or both of these defects, and therefore depend for their action on insulin which the body must produce and continue to act till it does so. Unfortunately the insulin production progressively declines making it necessary to increase the dose, use additional agents and finally insulin is needed which is then administered along with some of the oral agents. Insulin should be viewed in this context as a necessity and since modern insulin and devices permit control with little or no impact on the life of a person it should be accepted when prescribe to avoid the complications due to uncontrolled sugars.

There are many oral agents and their choice depends upon the efficacy, cost, tendency to produce weight gain, hypoglycemia, water retention, effects on the heart, bones, proclivity to cause cancer and presence of other conditions which may need the modification in their dose or contraindicate the use altogether (pregnancy, heart, kidney or liver disease).

Since weight gain, hypoglycemia and the need to take medications frequently are the issues around the use of medications for diabetes control research has led to the development of some drugs which avoid/minimize these (some drugs even produce weight loss) and can be administered less frequently without loss of efficacy. Additionally there is ongoing research on the safety of these on the heart.

Monitoring is a key component and permits to check the efficacy of the drugs and prevent, recognize and treat complications. Glucose measurements are useful for titrating the dose of drugs controlling it and this can even be done at home with glucometer, this not only helps the titration of the drugs but also permits to recognize and confirm hypoglycemia (low sugar reaction). If one is on drugs that have the propensity to cause hypoglycemia one should check with the doctor if alternate drugs that do not have that side effect can be used and if not how this can be recognized minimized, or prevented. Also some people around the patient should know about the same as well.



DR. PRASIN DEB
MD, DM, ENDO,
CONSULTANT DIABETOLOGIST
AND ENDOCRINOLOGIST,
YASHODA HOSPITAL
SOMAJIGUDA

YOU ARE WHAT YOU EAT

Diabetes is the new epidemic in developing India. I see so many young people developing diabetes at a much earlier age compared to people in the west – a trend that's attributed to our genetics and our adopting a western taste for calorie-rich, ready-to-eat, processed food. But, what people don't realize is this: every extra inch on their waistline matters. So eating healthy is a must – whether or not you have diabetes.

Plan it this way – in a day, 55 – 60% of the total calories must come from complex carbohydrates, 5-20% from proteins and about 20% from fat. Portion size is equally important. Eat smaller meals at shorter intervals. A good idea is to keep your plate colourful – lots of orange, green, yellow, red; basically plenty of fresh fruits and vegetables. Grains (wheat, rice), beans (chawli), lentils (dal) and fresh vegetables are excellent food choices since they are digested slowly and

cause a slower rise in blood sugar. Groundnut and rice bran oil are healthier options. Reduce starchy foods (like potato, yam, beetroot) and refined food made with maida or sugar, and bakery products. If you love sweets, try to avoid the ones that are deep fried or dripping in sugar syrup. Laddoos made with grain are a better alternative to those with milk and oil. 'Sugar-free' mithai may have fewer calories but will often have a higher fat content. Share your dessert with a loved one; it's fun and will compel you to eat less.

If you have type 1 diabetes, keep an eye on your carbohydrate consumption and how much insulin you need to keep blood glucose in check. If you have type 2 disease, then pay attention to the calories and carbohydrates you consume. Avoid skipping any meals.

In short, I have 3 simple rules: eat less, eat right and eat on time.

World Diabetes Day



THE CHECK-LIST

DR. R.N. MEHROTRA,
MD, DM, ENDO
SENIOR CONSULTANT ENDOCRINOLOGY AND DIABETES,
APOLLO HOSPITALS JUBILEE HILLS.

I think most doctors will tell you that 'Prevention is better than cure.' Regular check-ups will ensure that you notice any abnormality early on and take the necessary steps to treat it. There's an easy way to remember the basic tests you need to do, at least once every 6 months. We call it the "ABCs" of diabetes control.

A is for A1C (or HbA1c) – that's glycated hemoglobin. It's a gold standard test that reflects how well you've controlled your blood sugar levels over the past 2 – 3 months. Aim to keep that value below 7% which indicates good sugar control. I find that most patients are familiar with fasting plasma glucose (FPG) and post meal/post prandial glucose (PPG) levels which should be below 110 and 140 mg/dl respectively and are valuable indicators of current blood sugar levels. Patients with type 1 diabetes will often monitor and record their glucose levels before a meal. Next, B stands for

blood pressure which must be below 120/80. A higher value would mean you're putting greater stress on your heart. C stands for cholesterol. A complete lipid profile test will measure your good cholesterol (HDL), bad cholesterol (LDL), triglycerides and total cholesterol. Keep those numbers above 45 mg/dl and below 100, 150 and 180 mg/dl respectively.

50% of people suffering from diabetes type 2 already have other underlying co-morbid conditions at the time of diagnosis itself, which can lead to severe complications later. Hence, once a year, it's important to have an eye examination to check for glaucoma, cataract, retinopathy etc., a dental examination, a urine examination to check for possible kidney related complications and a thorough foot check to detect any cuts, bruises or sores.