

WORLD HEALTH DAY (WHD) : 7th April, 2016
THEME OF THIS YEAR'S WORLD HEALTH DAY : BEAT DIABETES MELLITUS (DM)

Goals of World Health Day Theme: (1) scale up prevention (2) strengthen care and (3) enhance surveillance

Diabetes Mellitus (DM) is chronic, metabolic preventable and treatable non-communicable disease characterized by elevated Blood Sugar which leads to serious damage to Heart, Blood Vessels, Eyes, Kidneys and Nerves.

Type 1 Diabetes Mellitus (insulin dependent DM or Juvenile-onset DM) : it occurs when Pancreas does not produce enough Insulin due to loss of Insulin producing Beta Cells of the islets of Langerhans.

Type 2 Diabetes Mellitus (Non-insulin dependent DM or Adult onset DM) : It occurs when body can not effectively use Insulin which it produces or does not make enough insulin. It is due to excessive body weight and physical inactivity.

Gestational DM : If pregnant women's Blood Sugar is high, it can damage health of mother or fetus. There may be high birth weight, congenital heart disease or Central Nervous System Abnormalities.

Symptoms of Diabetes Mellitus (DM) :

Frequent Urination	Increased thirst	Fatigue	Confusion	Slow healing of cuts/wounds
Blurred vision	Headache	Uneasiness	Behavioural changes	
Increased hunger	Skin rashes	Seizures	Unconsciousness	

Acute Complications : Diabetic Ketoacidosis (nausea, vomiting, abdominal pain, acetone smell of breath)

Long term Complications : Cardiovascular Disease, Stroke, Chronic Kidney Failure, Diabetic Foot Ulcer, damage to Eyes, Peripheral Vascular Disease, Nerves Damage, Cognitive Deficit.

Diagnosis of DM:-

Fasting Plasma Glucose (FPG) level ≥ 126 mg/dl, Oral Glucose Tolerance Testing (OGTT) ≥ 200 mg/dl, Glycosylated Hb (HbA_{1c}) ≥ 6.5 DCCT%

Condition	Fasting glucose	2 hour glucose	HbA _{1c}
Unit	mg/dl	mg/dl	DCCT %
Normal	<110	<140	<6.0
Impaired Fasting Glycaemia (IFG)	<126	<140	6.0-6.4
Impaired Glucose Tolerance (IGT)	<126	≥ 140	6.0-6.4
Diabetes Mellitus (DM)	≥ 126	≥ 200	≥ 6.5

Treatment of DM :-

Type 1 DM	Managed with injectable regular and NPH insulin or synthetic insulin analogs.
Type 2 DM	Treated with medicines with or without insulin. Metformin is first line of treatment for T2 DM.

Ways to beat DM :

Healthy Diet	60 minutes of Physical Exercise	Maintaining Normal Body Weight	Blood Pressure should be $\leq 140/90$ mmHg	Include proteins in diet like Dal, Soya, Pulses, Yogurt, Milk, Paneer
Proper Foot Care	Control Blood Pressure	Avoid Tobacco		

Eat more vegetables	The exception would be the starchier vegetables like potatoes, corn and peas. It is probably wiser to consume the starches in the form of starchy vegetables more often than bread or pasta. Starchy vegetables provide more vitamins, minerals, fibre than more processed, refined breads, pastas.
Pour on some fat	<ul style="list-style-type: none"> Add a tablespoon of nuts, particularly almonds or walnuts to a salad, soup or main food. Instead of using low-fat salad dressings, drizzle a tablespoon of olive oil.
Eat for healing	<ul style="list-style-type: none"> Garlic, oatmeal lowers cholesterol levels and blood pressure. Phytochemical (lutein) found in spinach & dark leafy greens fights macular degeneration.
Drink water constantly	<ul style="list-style-type: none"> Water is best, milk, juices, watery fruits, veggies, soups, decaffeinated tea, grape juice. Don't wait until you are thirsty.
Eat more frequently	Eat 4-5 smaller meals per day.

Alternate grains like sorghum, ragi, jawar, bajra are better than rice and wheat.

Eat Fruits : Guava, Kiwi, Jamun, Strawberry, Oranges, Watermelon, Pear, Apple, Avocado, Quinoa, red grapes.

Avoid highly processed foods, sugar laden/ Caffeinated beverages, alcohol, trans fats, fried, fast foods, red meat

(Dr. Sunil)
Chief Medical Officer