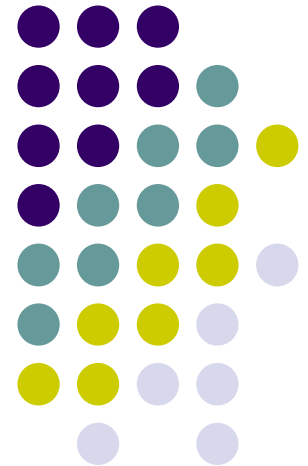


# Beat Your Blood Sugar



**Brought To You By:**



**Source Supported By:**

Assistant Professor Dr Sasikala Chinnappan  
Faculty of Pharmaceutical Sciences  
UCSI University

# Diabetes



## IDF DIABETES ATLAS

Eighth edition 2017

- ✓ The International Diabetes Federation (IDF) Diabetes Atlas reveals that 425 million adults worldwide are currently living with diabetes.
- ✓ Over 200 million women live with diabetes.
- ✓ Diabetes is the eighth leading cause of death worldwide.

# Diabetes Facts



Number of people with diabetes worldwide  
in 2017 and 2045 (20-79 years)



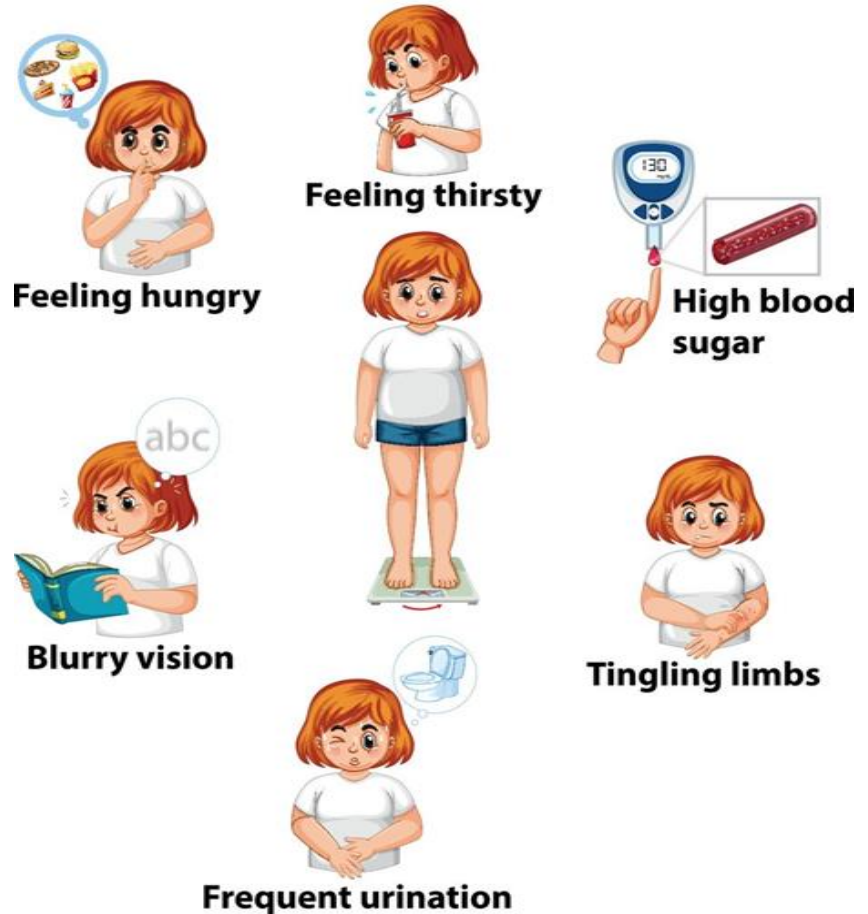
# Diabetes



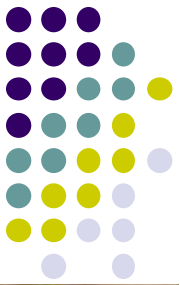
## What is Diabetes?

- Blood glucose (sugar) levels higher than normal
- Not enough insulin to allow glucose to enter cells to be used for energy

## DIABETES SYMPTOMS



# Types of Diabetes



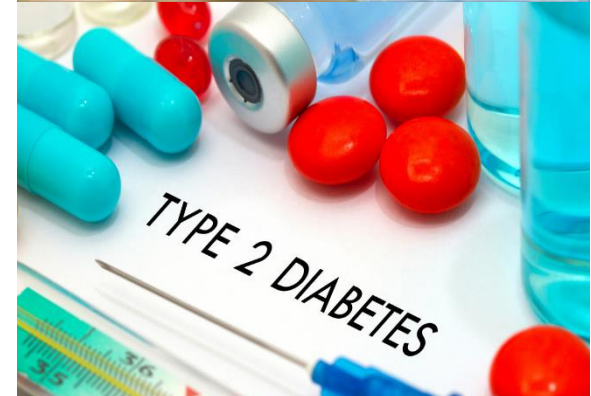
## Type 1 diabetes

- Usually diagnosed in children and young adults



## Type 2 diabetes

- Most common form
- Most often diagnosed in adults

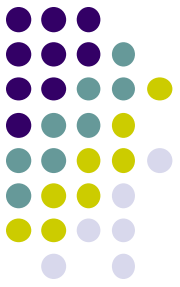


## Gestational diabetes

- Can appear during pregnancy
- High risk for Type 2 diabetes later in life



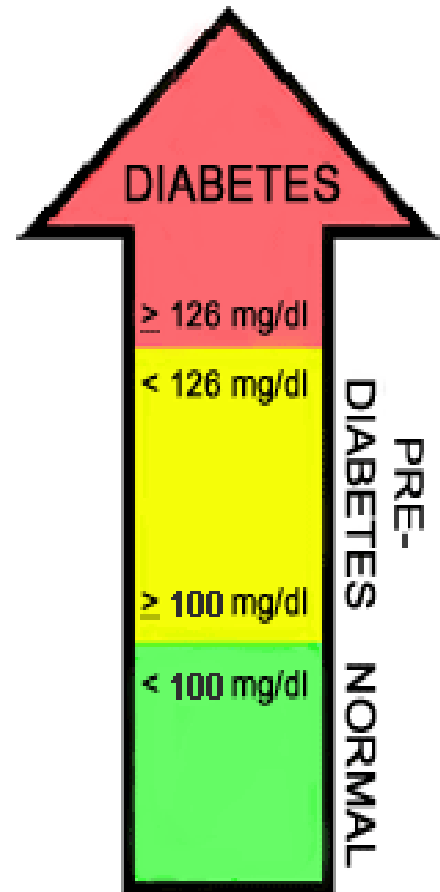
# Diagnosing

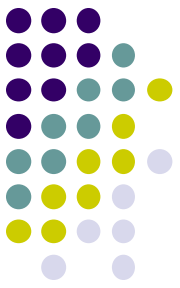


## How is diabetes diagnosed?

### ● Diabetes

- Fasting blood glucose of 126 mg/dl (7 mmol/L) or higher



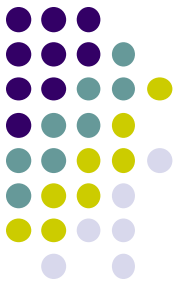


# Get Checked

Get your blood glucose checked for diabetes if you are

- Age 45 or older and overweight
- Age 45 or older and not overweight – ask your doctor if you need to be tested
- Under age 45, but overweight and at increased risk for diabetes

# Self-Monitoring of Blood Glucose (SMBG)



- **Self-Monitoring of Blood Glucose (SMBG)** is an approach whereby people with diabetes measure their **blood** sugar (glycemia) themselves using a glycemic reader (**glucose** meter).



**Self-Monitoring  
of Blood Glucose**

## General Directions for SMBG<sup>a</sup>

1. Wash and dry the hands.
2. Load the test strip into the meter.
3. Load the lancet into the device.
4. Lance the skin.
5. Apply blood to the test strip.
6. Wait for a result.
7. Integrate the result into the self-management plan.



# Risk Factors

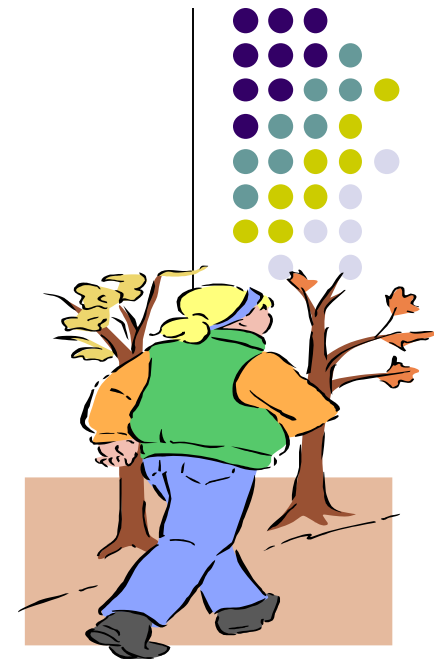


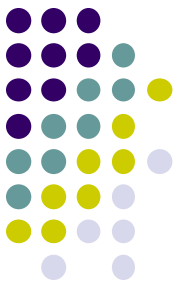
- A parent, brother or sister who has diabetes
- You had a baby weighing more than 9 pounds or had gestational diabetes
- You have high blood pressure (over 140/90 mm Hg)
- You have low HDL cholesterol (40 mg/dL or lower)
- You have high triglycerides (200 mg/dL or higher)

# Preventing Diabetes

## Prevent type 2 diabetes with

- ✓ Regular physical activity (At least two and a half hours of moderate to vigorous intensity physical activity per week)
- ✓ Maintain normal BMI (18.5 – 24.9)
- ✓ Healthy food (Fruits, Vegetables, Whole grains, Legumes such as beans and peas, Low-fat dairy products such as milk and cheese)





# Pharmacological approach

## Type I DM

- Insulin therapy



## Type II DM

- Lifestyle modification and oral hyperglycemic agent (OHA)



# Dietary Supplements for Diabetes

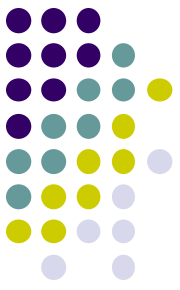


- **Alpha-lipoic acid<sup>1</sup>**
- **Vitamin D<sup>2</sup>**
- **Omega-3 fatty acid<sup>3</sup>**
- **Herbal Supplements- *Scoparia dulcis*<sup>4</sup>, *Cinnamomum cassia*<sup>5</sup>, *Ficus racemosa*<sup>6</sup> and *Portulaca oleracea*<sup>7</sup>**

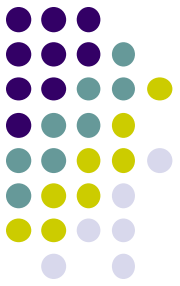


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# Role of pharmacist in diabetic care



- Pharmacists, as frontline members of primary healthcare, can help in the early detection and monitoring of diabetes by checking blood glucose in the community pharmacy.
- Pharmacists can give advice regarding the best use of medicines whether to take before, after or with food, its possible side effects, storage, etc.
- Pharmacists can also help you to take your medicines as per the treatment schedule.
- Pharmacists can help you use the Right Medication, Right Dose, Right Syringe and Right Injection Technique.



Thanks

