

## India's First Diabetes Biobank

### Why in News?

Recently, India sets up its first diabetes biobank.

- **Diabetes Biobank** - It is a **repository of population-based biological samples**.
- **Aim** - To facilitate advanced research on diabetes, variations of the Indian type and related disorders.
- **Set up by** - It is a joint collaboration of
  - Indian Council of Medical Research (ICMR)
  - Madras Diabetes Research Foundation (MDRF)
- **Operated at** - **Madras Diabetes Research Foundation** (MDRF), Chennai.
- **Role** - It is designed to collect, process, store, and distribute biological samples to advance diabetes research.
- **Storage** - A plethora of blood samples of different types of diabetes in the young, such as **Type 1, Type 2 and gestational diabetes**, have been stored for future studies and research.

**Biobanks** is a collection of biological samples (such as blood) and health information. It is critical in biomedical research, collecting, processing, storing and distributing biospecimens.

### Diabetes

- **Diabetes** - A chronic metabolic disease that occurs when the blood glucose, also called Blood Sugar, is too high.
- **Symptoms** - Feeling very thirsty
  - Need to urinate more often than usual
  - Blurred vision
  - Feeling tired
  - Losing weight unintentionally.
- **Types of diabetes**

| Type 1 diabetes<br>(Juvenile diabetes)                                         | Type 2 diabetes                                      | Gestational diabetes                |
|--------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|
| It occurs in <u>children</u> and young adults.<br>(Insulin-dependent diabetes) | It occurs at <u>any age</u> , even during childhood. | It occurs <u>during pregnancy</u> . |

|                                                                                     |                                                                                                      |                                                                                                     |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| The immune system attacks and <u>destroys the pancreas cells</u> that make insulin. | The pancreas <i>isn't making enough insulin</i> to keep the blood glucose level in the normal range. | It is hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|

## Reference

[The Hindu| India's First Diabetes Biobank](#)

