

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

- **<u>Diabetes</u>** A <u>chronic metabolic disease</u> 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 (Juvenile diabetes) | Type 2 diabetes | Gestational diabetes |
|--|--|-------------------------------------|
| | It occurs at <u>any age</u> , even during childhood. | It occurs <u>during pregnancy</u> . |

The immune system attacks and *destroys the pancreas cells* that make insulin.

The pancreas <u>isn't making</u> <u>enough insulin</u> 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

