



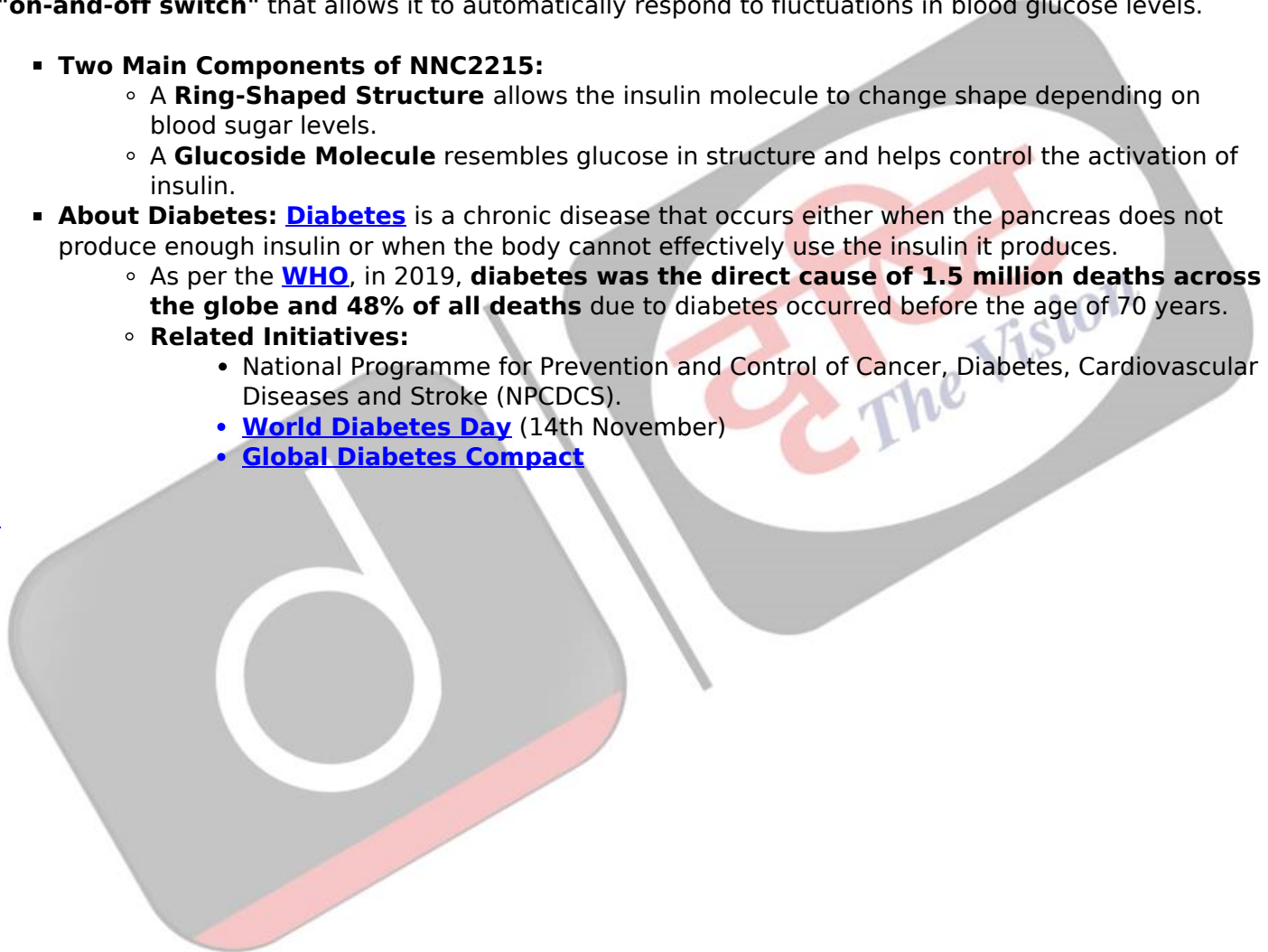
Smart Insulin for Diabetes

[Source: IE](#)

The latest study introduces **an engineered insulin molecule, named NNC2215**, which includes a built-in "**on-and-off switch**" that allows it to automatically respond to fluctuations in blood glucose levels.

- **Two Main Components of NNC2215:**
 - A **Ring-Shaped Structure** allows the insulin molecule to change shape depending on blood sugar levels.
 - A **Glucoside Molecule** resembles glucose in structure and helps control the activation of insulin.
- **About Diabetes:** [Diabetes](#) is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces.
 - As per the [WHO](#), in 2019, **diabetes was the direct cause of 1.5 million deaths across the globe and 48% of all deaths** due to diabetes occurred before the age of 70 years.
 - **Related Initiatives:**
 - National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS).
 - [World Diabetes Day](#) (14th November)
 - [Global Diabetes Compact](#)

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Diabetes: Type 1 vs. Type 2

Diabetes is on the climb — but there is a difference between Type 1 and Type 2. Do you know it?

Type 1 Diabetes

Your body is no longer able to produce insulin



Usually develops during childhood, but can develop at any age



Family history



- Bedwetting
- Blurry vision
- Frequent urination
- Increased appetite and thirst
- Mood changes and irritability
- Tiredness and weakness
- Unexplained weight loss



No known prevention methods



Insulin injections



Type 2 Diabetes

Your body still produces insulin, but it doesn't make enough of it or it doesn't use it efficiently

Can develop at any age but is most common in adults over 45

- Overweight and/or inactive
- Family history
- High blood pressure

- Increased appetite and thirst
- Dark patches on armpits/neck
- Frequent urination
- Blurry vision
- Tiredness and weakness
- Unexplained weight loss

Healthy lifestyle

Healthy living, possible insulin support

Read More: [Diabetes Mellitus and Tuberculosis](#)

