DENND1B Gene

Why in the News?

Recent research by the University of Cambridge has identified the DENND1B gene as a significant contributor to obesity in Labrador Retrievers and humans.

- **DENND1B** – An obesity gene in dogs and humans.
- The DENND1B gene is also found in humans, in whom it was also associated with *higher body mass*.
- **5 obesity-associated genes** – The researchers *identified five obesity-associated genes*, and then checked if these genes were also relevant to human obesity.
- Among the 5 obesity-associated genes, DENND1B gene was found to be *most strongly associated with body mass and obesity* in labradors.
- **Regulates appetite** – The gene essentially interferes with a brain signalling pathway that helps regulate our appetite.
- **Weight gain** – This gene affects the body's hunger and energy balance, which can lead to weight gain.
- Dogs with a mutation in this gene had about *8% more body fat than those without it*.
- **Multifaceted interplay** – Obesity is a complex condition resulting from a multifaceted interplay between genetic predispositions and environmental factors like diet and lifestyle, rather than being solely determined by either.

References

The Indian express | DENND1B Gene