Amylin

Physiological functions

What is amylin?

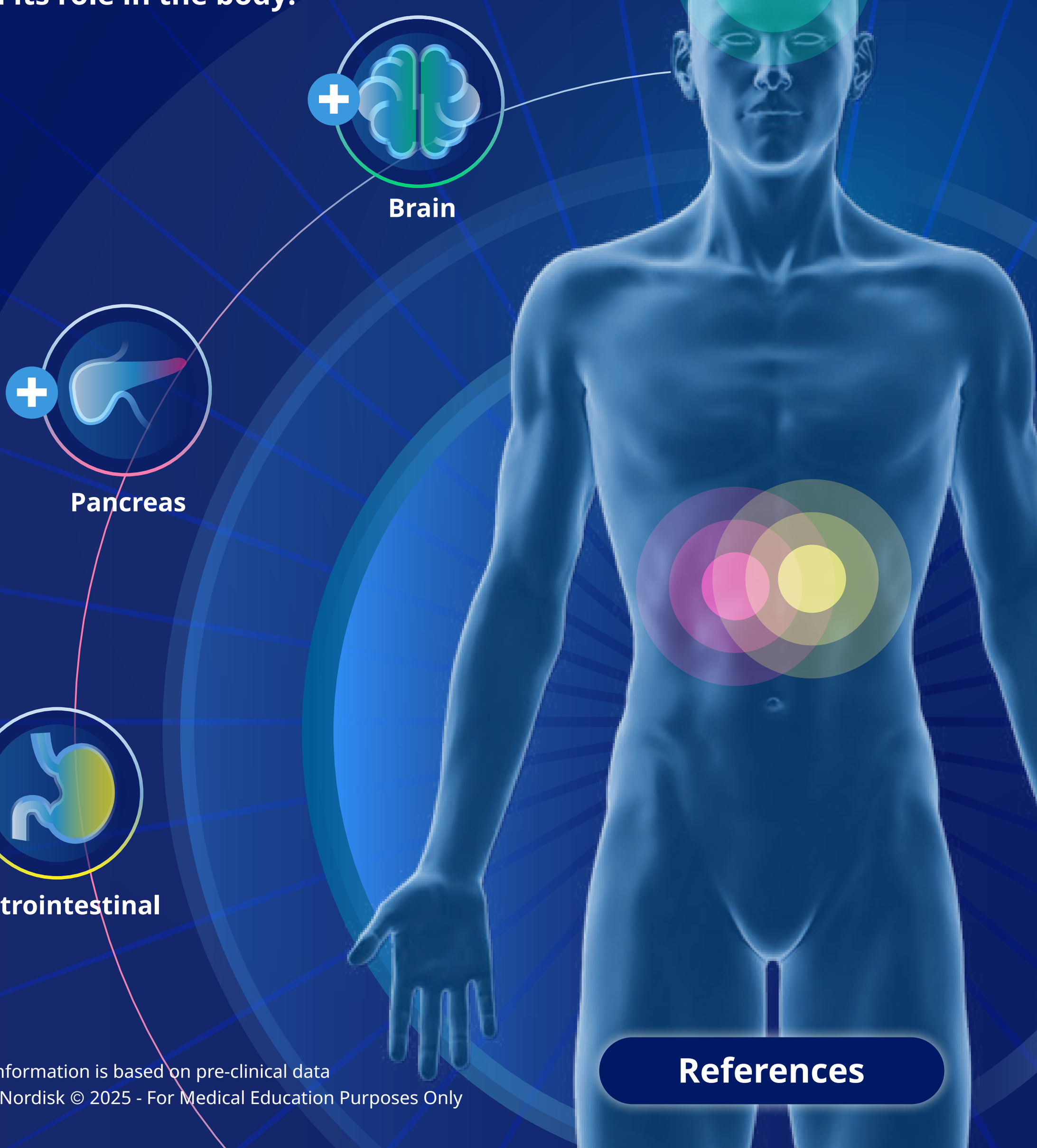
Amylin is a neuroendocrine peptide hormone comprised of 37 amino acids[1,2]

What role does amylin play?

Amylin may potentially play a vital role in many physiological processes, including:

- Central appetite regulation
- Glucose homeostasis, including postprandial glucose suppression
- Slowing of gastric emptying

Learn more about amylin and its role in the body:



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Brain

By targeting specific neurons in the hindbrain and the hypothalamus, and through subsequent downstream signalling in additional brain regions, amylin has the potential to increase satiety and reduce food intake[1,3,4]

Amylin increases responsiveness to leptin, partially restoring leptin's appetite-suppressing signals within the brain[4–6]

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Gastrointestinal

Amylin has the potential to slow gastric emptying, an effect that may be mediated by central stimulation of neurons in the area postrema[1–3], which modulates gastric efferent vagal tone[1,3]

Amylin's effect on gastric emptying slows the absorption of nutrients such as glucose, which can further reduce postprandial glucose levels[3]

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Pancreas

Amylin is co-secreted with insulin from pancreatic β-cells in response to food intake[1]

Amylin aids glucose regulation by suppressing the postprandial pancreatic release of glucagon, a hormone that stimulates glucose production, thereby having the potential to reduce the post-meal surge in glucose levels[1–3]

Amylin's effect on gastric emptying can further reduce postprandial glucose levels - *see 'gastrointestinal' section*

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References

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