

Diabetes Mellitus

- Multisystem disease related to:
- Abnormal insulin production
- Impaired Insulin utilization
- Leading cause of heart disease, stroke, adult blindness, non-traumatic lower limb amputations

Normal Insulin Metabolism

- Insulin produced by Beta cells in Ilets of Langerhans
- Normally released in small continuous amounts into blood stream
- Promotes glucose transport from bloodstream across cell membrane

Counter-Regulatory Hormones

- Glucagon, adrenaline, growth hormone and cortisol work to oppose the effects of insulin
- Hormones work to increase blood glucose levels by stimulating glucose production and decreased movement of glucose into cells

Increased Insulin after Meals

- Stim storage of glucose as glycogen in liver and muscles
- Inhibits gluconeogenesis
- Enhances fat deposition in adipose tissue
- Increases protein synthesis