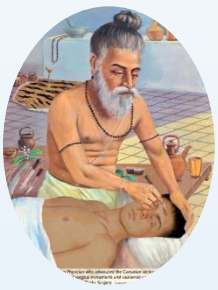
Aulus Cornelius Celsus writes first clinical description of diabetes — 30BC-AD50



AD30-90 — Aretaus of Cappadocia terms the condition "diabetes" - Greek for siphon

Indian surgeon Sushruta describes patients with a sweet sticky urine that attracts ants — 600s

1675 — Thomas Willis introduces the term "mellitus" (Latin for sweet or honeyed)

Paul Langerhans discovers pancreatic islet cells, known as the Islets of Langerhans — 1868

1888 — Mering and Minkowski induce diabetes in dogs by pancreatic removal

Opie discovers the islets of Langerhans produce a secretion, without which diabetes ensues — 1901

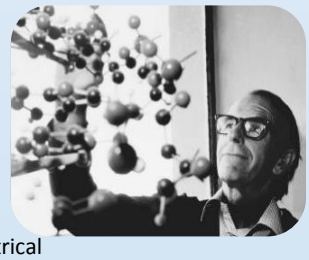
1921 — Banting and Best isolate pancreatic extract and use it to cure diabetes in dogs

First diabetic patient, Leonard Thompson, treated with purified bovine insulin — 1922

1923 — First commercial production of insulin by Eli Lilly

Banting and McLeod awarded the Nobel Prize for the discovery of insulin

Auguste Loubatieres discovers that sulphonamides stimulate insulin release — 1942



1955 — Insulin is the first protein to be sequenced, earning Fredrick Sanger a Nobel Prize in 1958

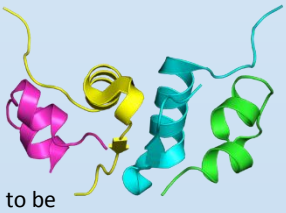
Islets of Langerhans are isolated (Keen, Hellerstrom)

Insulin is the first human protein to be chemically synthesised — 1963

1968 — First recording of β-cell electrical activity by Dean and Matthews

Discovery that glucose must be metabolised to cause insulin release

1972 — Structure of insulin determined by Dorothy Hodgkin



Rosalin Yalow awarded Nobel Prize for work on measuring insulin in the body — 1977

1978 — Insulin is the first recombinant protein to be produced in bacteria (Genetech)

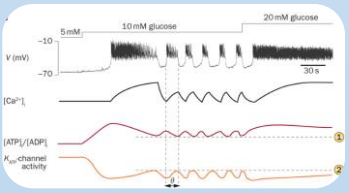
Insulin first recombinant human protein to be commercially licenced — 1982

1984 — Insulin receptor cloned – the first peptide hormone receptor to be sequenced

Glucose shown to close K_{ATP} channels, so stimulating electrical activity and insulin release

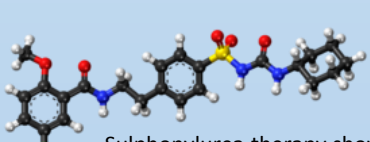
Human insulin receptor cloned

K_{ATP} channel shown to be the target for sulphonylurea drugs — 1985

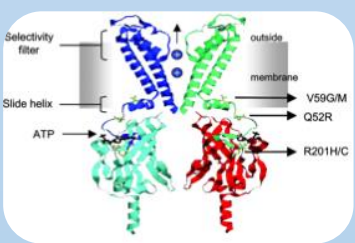


1995 — Cloning of the K_{ATP} channel

1997 — Function of K_{ATP} channel subunits elucidated



2004 — Mutation in K_{ATP} channel shown to cause neonatal diabetes



Sulphonylurea therapy shown to be better then insulin for treating K_{ATP} channel neonatal diabetes — 2006