

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

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



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

1868

Mering and Minkowski induce diabetes in dogs by pancreatic removal



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

1901

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

1921

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

1922

First commercial production of insulin by Eli Lilly

1923

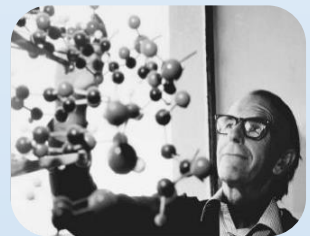
Banting and McLeod awarded the Nobel Prize for the discovery of insulin

Auguste Loubatieres discovers that sulphonamides stimulate insulin release

1942

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

1955



Islets of Langerhans are isolated (Keen, Hellerstrom)

1963

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

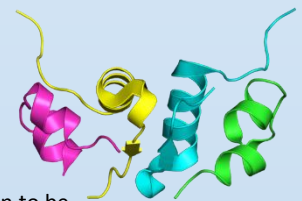
Insulin is the first human protein to be chemically synthesised

1968

Discovery that glucose must be metabolised to cause insulin release

Structure of insulin determined by Dorothy Hodgkin

1972



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

1977

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

1978

Insulin first recombinant human protein to be commercially licenced

1982

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

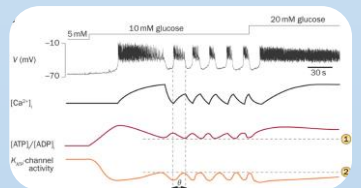
1984

Human insulin receptor cloned

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

1985

Cloning of the K_{ATP} channel



Function of K_{ATP} channel subunits elucidated

1997

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

2004

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

2006

