



Diabetes/Insulin Resistance Models

Scope of application

- Diabetes is an increasing health and economic burden in the world.
- We use the following models to analyse the anti diabetic effects of drugs.
- We use these models to analyse diabetic complications (please see there).

Models

Type II diabetes

We have used different genetic models of insulin resistance. Obesity, insulin resistance and development of diabetes characterize these models. All these models (db/db and ob/ob mice as well as fa/fa rats) have a defect in the leptin system.

Diet induced obesity

We use a custom-made high fat diet to induce obesity and insulin resistance.

Type I diabetes

We use streptozotocin to induce “type I” diabetes.

Measurement of insulin resistance

To measure insulin resistance we perform the following tests:

- Homer Index
- Oral glucose tolerance test (OGTT)
- Intraperitoneal glucose tolerance test (IPGTT)
- Hyperinsulinemic euglycemic clamp in swiveled animals (on request)