A widely used and accepted diet-induced model to quickly evaluate your drug's efficacy on weight loss, glucose tolerance, insulin sensitivity and glucose homeostasis.

**Key benefits**

- Get a complete and rapid evaluation of your drug's efficacy on food intake, weight loss and visceral adiposity, insulin sensitivity and glucose homeostasis in this diet-induced mouse model of obesity and insulin resistance.

- Combine this widely used nutritional model with our hyperinsulinemic euglycemic clamp technique in conscious mice to demonstrate the mechanism by which your drug improves insulin resistance.

**MODEL FEATURES**

- **Background strain:** C57BL/6J mouse, male
- **Diet:** 60% high fat diet, ref# D12492 from Research Diets
- **In life study duration:** depends on treatment schedule (preventive: 12 weeks diet – curative: ready-to-use, no diet period)
- **Positive drug controls:** metformin, pioglitazone, liraglutide
- **Positive nutraceutical controls:** green tea and green coffee

**BODY WEIGHT & FOOD INTAKE**

GLP-1 RECEPTOR AGONIST LIRAGLUTIDE REDUCES BOTH BODY WEIGHT AND FOOD INTAKE

- **FOUR-WEEK TREATMENT WITH PIOGLITAZONE IMPROVES BOTH GLUCOSE AND INSULIN TOLERANCE**

**GREEN COFFEE BETTER REDUCES BODY WEIGHT AND FAT MASS THAN GREEN TEA**

- **FOUR-WEEK TREATMENT WITH PIOGLITAZONE IMPROVES INSULIN SENSITIVITY AND INDIVIDUAL TISSUE GLUCOSE UPTAKE**

**HYPERINSULINEMIC EUGLYCEMIC CLAMP**

- **FOUR-WEEK TREATMENT WITH PIOGLITAZONE IMPROVES**
  - Insulin sensitivity and individual tissue glucose uptake.

**GLUCOSE AND INSULIN TOLERANCE TESTS**

- **FOUR-WEEK TREATMENT WITH PIOGLITAZONE IMPROVES**
  - Both glucose and insulin tolerance.

(A) Blood glucose levels, (B) area under the curve, (C) plasma insulin during an oral glucose tolerance test, (D) blood glucose levels and (E) area under the curve during an insulin tolerance test in chow fed or DIO mice treated with vehicle or pioglitazone. 

***p<0.001 DIO vs. chow, ###p<0.001 DIO vehicle vs. pioglitazone