

# The diet-induced obese mouse

A standard mouse model of diet-induced obesity for drug efficacy testing.

## Standard model for profiling drug therapeutic effects in obesity

High-fat diet-induced obese (DIO) mouse is the most common mouse model employed in preclinical obesity drug development.

### Key model traits

- Obesity and adiposity.
- Prediabetes characterized by insulin resistance and impaired glucose tolerance.
- Similar dysmetabolic phenotype in mice and rats.
- Treatment efficacy across a wide range of anti-obesity and anti-diabetic drug classes.

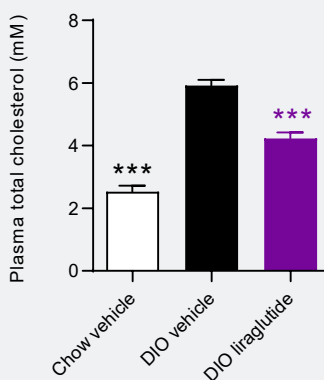
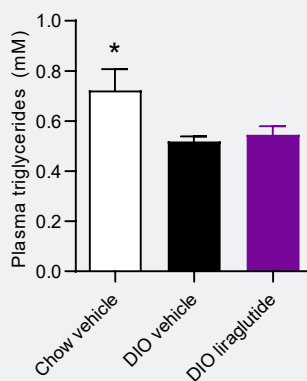
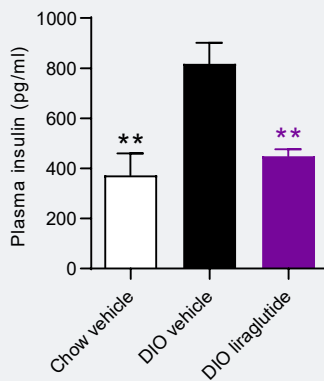
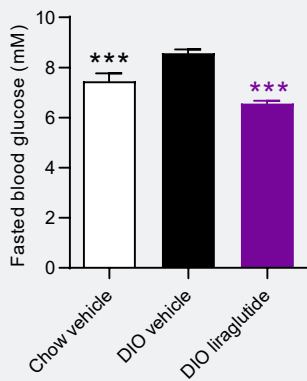
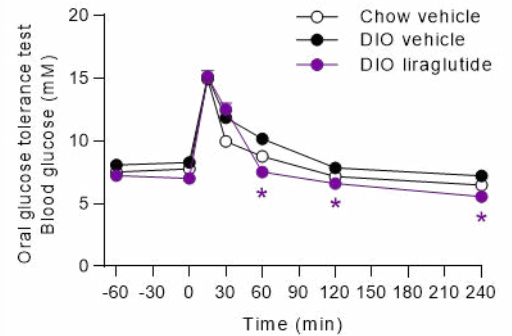
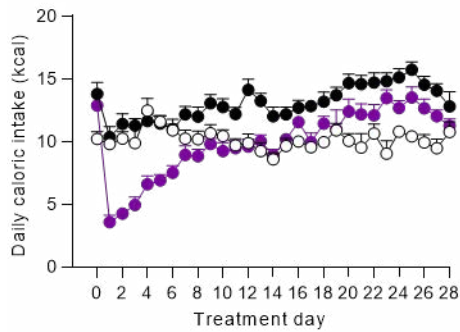
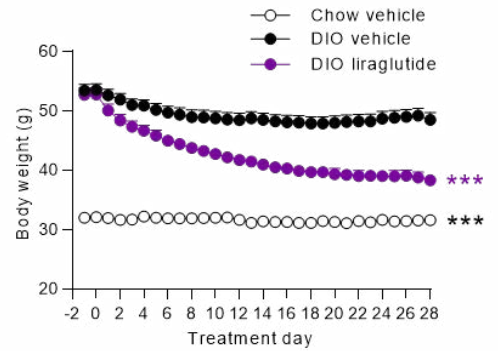
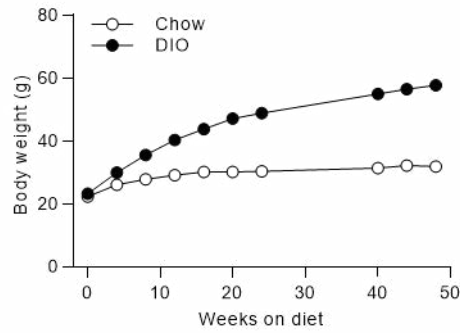
<b>Diet</b>	HFD 60% fat (Ssniff #D12492) Chow (Altromin 1324)	Diet-induced obesity mice are enrolled into studies after ≥18 weeks of high-fat diet induction. Age-matched chow-fed animals serve as lean controls.
<b>Strain</b>	C57BL/6JRj	

## Study outline



## Body weight, food intake and glucose tolerance

4 weeks of liraglutide (GLP-1 agonist) treatment promotes robust weight loss, appetite suppression and improves glucose tolerance in DIO mice.



## Blood biochemistry

DIO mice develop mild hyperglycemia, hyperinsulinemia and elevated plasma levels of triglycerides and cholesterol.

Liraglutide treatment for 4 weeks improves blood biochemistry in DIO mice.