

## Special Diet-induced Mouse Models

Depending on the genetic background of mice used for the feeding study, the diet can be used to induce obesity, diabetes, metabolic syndrome, atherosclerosis but also to worsen the pathology of Alzheimer's or Parkinson's disease transgenic mice.

Wild type or transgenic mice are fed with the diet of your choice (Western-type, high/low fat, high fructose/sucrose etc.). Animals can be analyzed depending on your research question for the following readouts:

### *In vivo:*

- Body weight
- Food consumption (caloric / fat intake)
- Whole gut transit time
- *In vivo* blood sampling
- Glucose tolerance test
- Activity and motor ability
- Nesting Behavior
- Cognition
- Evans Blue test for BBB permeability (terminal)



### *Ex vivo:*

- Inflammation marker by MesoScale Discovery
- Serum lipid profile (LDL, HDL, total cholesterol, triglycerides, insulin)
- Resection of different adipose tissues
- Evaluation of CD45 and F4/80 in liver
- Preparation of Swiss roll of intestine and further analysis for
  - PGP9.5 to mark enteric neurons
  - Vimentine to mark mesenchymal cells including fibroblasts
  - Leukocyte infiltration
  - B- and T-cell marker (B220/CD45R, CD3)
  - Macrophages (F4/80, Iba1)
  - Macrophages and Monocytes (CD68, CD11b)
  - Or any marker of your choice

Can't find the readout you are looking for?

We are happy to establish new readouts according to your needs!