



May 08,
2019

Working

UC Davis - High fat diet feeding [↗](#)

Kristin Evans¹

¹University of California, Davis

[dx.doi.org/10.17504/protocols.io.xfmfjk6](https://doi.org/10.17504/protocols.io.xfmfjk6)

Mouse Metabolic Phenotyping Centers

Tech. support email: info@mmpc.org

Lili Liang

ABSTRACT

Summary

A high-fat diet of varying composition and percent fat is administered to induce obesity in mice. High-fat diet induced obesity is causally associated with insulin resistance and type 2 diabetes. Diets will be provided in consultation with the investigator needs. This service applies to specialized feeding for vendor supplied animals being supplied out of the UC Davis vendor approved barrier facility.

EXTERNAL LINK

<https://mmpc.org/shared/document.aspx?id=266&docType=Protocol>

MATERIALS

NAME	CATALOG #	VENDOR	CAS NUMBER	RRID
Teklad 2918 (18% kcal from fat)	Teklad 2918	Harlan Teklad Research Diets		
TD.06415 (45% kcal from fat)	TD.06415	Harlan Teklad Research Diets		
TD.06414 (60% kcal from fat)	TD.06414	Harlan Teklad Research Diets		
D12450B (10% kcal from Fat)	D12450B	Research Lab Diets		
D12451 (45% kcal from fat)	D12451	Research Lab Diets		
D12492 (60% Kcal from fat)	D12492	Research Lab Diets		
58Y1 (60% kcal from fat)	58Y1	Purina Test Diet®		
58V8 (45% Kcal from fat)	58V8	Purina Test Diet®		
58Y2 (10% kcal from fat)	58Y2	Purina Test Diet®		
Mouse cohorts for feeding	C57BL/6J	Jackson Laboratory		IMSR_JAX:000664
Mouse cohorts for feeding	C57BL/6NCrl	Charles River		IMSR_CRL:27
Mouse cohorts for feeding	C57BL/6NTac	Taconic		IMSR_TAC:b6

MATERIALS TEXT

NOTE:

Harlan Teklad Research Diet, Purina Test Diet, and Research Lab Diets must be irradiated and vacuum sealed.

Jackson Laboratory, [RRID:SCR_004633](#)

Charles River Laboratories, [RRID:SCR_003792](#)

Taconic Biosciences, [RRID:SCR_016410](#)

C57BL/6J, IMSR Cat# JAX:000664, [RRID:IMSR_JAX:000664](#)

C57BL/6NCrl, IMSR Cat# CRL:27, [RRID:IMSR_CRL:27](#)

- 1 High-fat diet is given ad libitum in mice. Typically mice are started on the diet at 6 weeks of age (for C57BL/6 strains). Age at diet start will be begin in consultation with the investigator needs
- 2 A stock bag of high-fat diet should be stored in a refrigerator.
- 3 High-fat diet placed in cages should be replaced 2 times a week to avoid spoilage.
- 4 Mice will typically eat more in the first 2 weeks of high fat diet feeding. Careful attention to diet intake will be taken during this time.
- 5 Diet intake measurement and animal weights may be taken in consultation with the investigator as a separate service.



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited