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UC Davis - High fat diet feeding

Kristin Evans¹

¹University of California, Davis

Mouse Metabolic Phenotyping Centers

Tech. support email: info@mmpc.org

Lili Liang

OPEN ACCESS

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Protocol status: Working
We use this protocol in our group and it is working.

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19661

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.

Keywords: A high-fat diet, obesity in mice

MATERIALS

MATERIALS

Teklad 2918 (18% kcal from fat) Harlan Teklad Research Diets Catalog #Teklad 2918
TD.06415 (45% kcal from fat) Harlan Teklad Research Diets Catalog #TD.06415
TD.06414 (60% kcal from fat) Harlan Teklad Research Diets Catalog #TD.06414
D12450B (10% kcal from Fat) Research Lab Diets Catalog #D12450B
D12451 (45% kcal from fat) Research Lab Diets Catalog #D12451
D12492 (60% Kcal from fat) Research Lab Diets Catalog #D12492
58Y1 (60% kcal from fat) Purina Test Diet® Catalog #58Y1
58V8 (45% Kcal from fat) Purina Test Diet® Catalog #58V8
58Y2 (10% kcal from fat) Purina Test Diet® Catalog #58Y2
Mouse cohorts for feeding Jackson Laboratory Catalog #C57BL/6J
Mouse cohorts for feeding Charles River Catalog #C57BL/6NCrI
Mouse cohorts for feeding Taconic Catalog #C57BL/6NTac

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

C57BL/6NTac, IMSR Cat# TAC:b6, [RRID:IMSR_TAC:b6](#)

- 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.