



Chronic High-Fat/Sugar Diet Feeding

Version: 2

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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’s needs. This service applies to specialized feeding for vendor supplied animals being supplied out of the UC Davis vendor approved barrier facility.

Reagents and Materials:

Reagent/Material	Vendor	Stock Number
Specialized high fat diet (at investigator request)	Harlan Teklad Research Diet (must be irradiated and vacuum sealed)	Teklad 2918 (18% kcal from fat) TD.06415 (45% kcal from fat) TD.06414 (60% kcal from fat)
	Purina Test Diet (must be irradiated and vacuum sealed)	58Y2 (10% kcal from fat) 58Y1 (60% kcal from fat) 58V8 (45% kcal from fat)
	Research Lab Diet (must be irradiated and vacuum sealed)	D12450B (10% kcal from fat) D12451 (45% kcal from fat) D12492 (60% kcal from fat)
	Additional vendors must be cleared for entry into the vendor approved barrier	Additional diets must be cleared for entry into the vendor approved barriers
Mouse cohorts for feeding	M3- C57BL/6J	C57BL/6J, C57BL/6NCrl, C57BL/6NTac – available
	Specialized stocks and lines	Available for rederivation into the barrier upon request

Protocol:

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.