#### TD.06414 Adjusted Calories Diet (60/Fat)

Formula	g/Kg
Casein	265.0
L-Cystine	4.0
Maltodextrin	160.0
Sucrose	90.0
Lard	310.0
Soybean Oil	30.0
Cellulose	65.5
Mineral Mix, AIN-93G-MX (94046)	48.0
Calcium Phosphate, dibasic	3.4
Vitamin Mix, AIN-93-VX (94047)	21.0
Choline Bitartrate	3.0
Blue Food Color	0.1

# **Key Features**

- Purified Diet
- Diet Induced Obesity
- High Fat

## **Key Planning Information**

- Products are made fresh to order
- Store product at 4°C or lower
- Use within 6 months (applicable to most diets)
- Box labeled with product name, manufacturing date, and lot number
- Replace diet at minimum once per week More frequent replacement may be advised
- Lead time:
  - · 2 weeks non-irradiated
  - 4 weeks irradiated

## **Product Specific Information**

- 1/2" Pellet or Powder (free flowing)
- Minimum order 3 Kg
- Irradiation available upon request

#### **Options** (Fees Will Apply)

- Rush order (pending availability)
- Irradiation (see Product Specific Information)
- Vacuum packaging (1 and 2 Kg)

#### International Inquiry

- Outside U.S.A. or Canada
- askanutritionist@harlan.com

## Place Your Order (U.S.A. & Canada)

- Place Order · Obtain Pricing · · Check Order Status ·
- (800) 483-5523
- (608) 277-2066 facsimile
- tekladinfo@harlan.com
- Helping you do research better

## Footnote

Approx. 60% of total calories come from fat. Designed with similarities to Research Diets, Inc. formula D12492. For the series TD 06414-TD 06416. Approximate fatty acid profile (% of total fat): 37% saturated, 47% monounsaturated, 16% polyunsaturated.

#### Selected Nutrient Information<sup>1</sup>

	% by weight	% kcal from
Protein	23.5	18.4
Carbohydrate	27.3	21.3
Fat	34.3	60.3
Kcal/g 5.1		

<sup>1</sup> Values are calculated from ingredient analysis or manufacturer data

Teklad Diets are designed & manufactured for research purposes only.

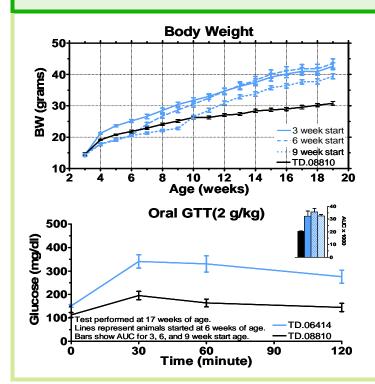
## Speak With A Nutritionist

- (800) 483-5523
- askanutritionist@harlan.com

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## Phenotype of C57BL/6NHsd Male Mice Fed TD.06414 or TD.08810



Percent Fat by DEXA 3 week start 50· 🖾 6 week start 🚾 9 week start TD.08810 40 te 40 L % 30 20 10 1<sup>5</sup> Age (weeks) ģ 19

# **Key Findings**

Male C57BL6/N mice started on TD.06414 at 3, 6, or 9 weeks of age develop similar degrees of obesity shown by rapid increase in body weight and percent fat mass.

Mice started on TD.06414 between 3-9 weeks of age develop impaired glucose tolerance by 17 weeks of age.

Mice fed TD.06414 develop hyperinsulinemia, hyperleptinemia, and exhibit increased liver accumulation of lipids.

The graphs above represent data obtained from male C57BL/6NHsd mice started on irradiated TD.06414 at 3, 6, or 9 weeks of age (16 mice/start age). Control animals were fed an irradiated purified diet TD.08810, or autoclaved natural ingredient diet 2018S. The data in the tables below is from a second cohort of mice started on the diets at 3 weeks of age. Prior to oral glucose tolerance test and collection of fasting values, mice were fasted for 6 hours (6am-12pm). Data are shown as mean ± SEM.

Additional Phenotype Data			
11-12 weeks of age	TD.06414	TD.08810	2018S
Body Weight (g, n=20)	32.1 ± 0.5	25.6 ± 0.3	25.0 ± 0.3
Percent Fat by NMR (n=20)	33.7 ± 1.1	19.2 ± 0.6	17.7 ± 0.4
Liver Triglyceride (mg/g liver, n=5)	75.5 ± 7.1	27.2 ± 3.9	34.9 ± 2.4
Fasted Total Cholesterol (mg/dl, n=20)	193 ± 7	119 ± 3	141 ± 3
Fasted Glucose (mg/dl, n=20)	166 ± 4	113 ± 2	120 ± 2
Fasted Insulin (ng/ml, n=20)	$2.5 \pm 0.2$	0.8 ± 0.1	0.7 ± 0.1
Non-fasted Leptin (ng/ml, n=20)	37.2 ± 3.9	$3.0 \pm 0.6$	$2.5 \pm 0.2$
19-20 weeks of age	TD.06414	TD.08810	2018S
Body Weight (g, n=14-20)	43.1 ± 0.9	29.4 ± 0.5	28.1 ± 0.5
Percent Fat by NMR (n=14-20)	45.2 ± 1.1	24.1 ± 0.7	21.8 ± 1.2
Liver Triglyceride (mg/g liver, n=5)	162.9 ± 46.3	40.6 ± 7.1	47.5 ± 4.8
Fasted Total Cholesterol (mg/dl, n=14-20)	253 ± 11	107 ± 3	142 ± 4
Fasted Glucose (mg/dl, n=14-20)	146 ± 5	115 ± 3	116 ± 5
Fasted Insulin (ng/ml, n=14-20)	$5.0 \pm 0.6$	0.9 ± 0.1	0.8 ± 0.1
Non-fasted Leptin (ng/ml, n=14-20) *11 of 16 mice had values greater than the detection limit and were set to 100 ng/ml.	*86.9 ± 6.1	5.2 ± 0.8	5.4 ± 0.9

For additional study details, please refer to the posters on our website or contact a nutritionist at askanutritionist@harlan.com

