Teklad Custom Diet

TD.06414

Adjusted Calories Diet (60/Fat)

ENVIGO

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**

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[1]

	% by weight	% kcal from
Protein	23.5	18.3
Carbohydrate	27.3	21.4
Fat	34.3	60.3
Kcal/g 5.1		

[1] Values are calculated from ingredient analysis or manufacturer data

Speak With A Nutritionist

+ **(800) 483·5523**
+ **askanutritionist@envigo.com**

Teklad diets are designed & manufactured for research purposes only.

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)

Contact Us

Obtain pricing · Check order status

+ **teklad@envigo.com**
+ **(800) 483·5523**

International Inquiry *(outside USA or Canada)*

+ **askanutritionist@envigo.com**

Place Your Order (USA & Canada)

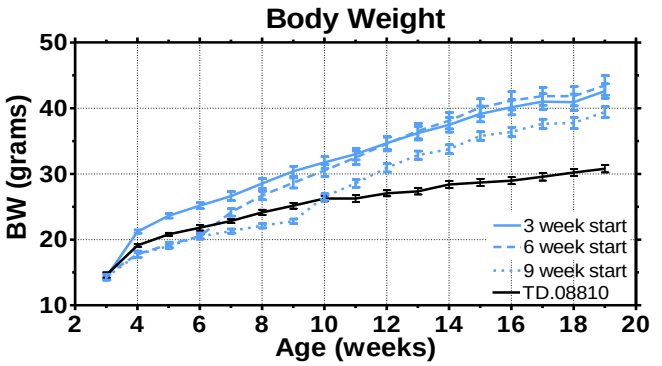
Please Choose One

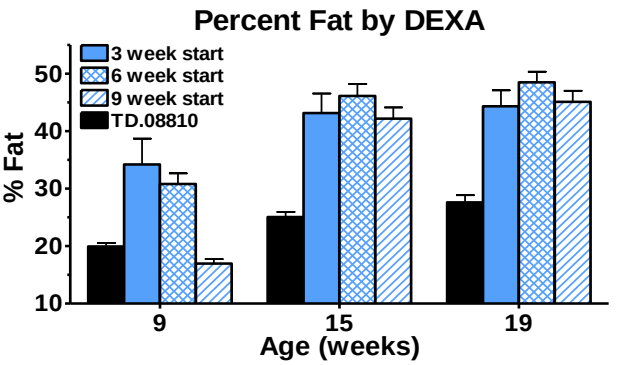
+ **envigo.com/teklad-orders**
+ **tekladorders@envigo.com**
+ **(800) 483·5523**
+ **(608) 277·2066** *facsimile*

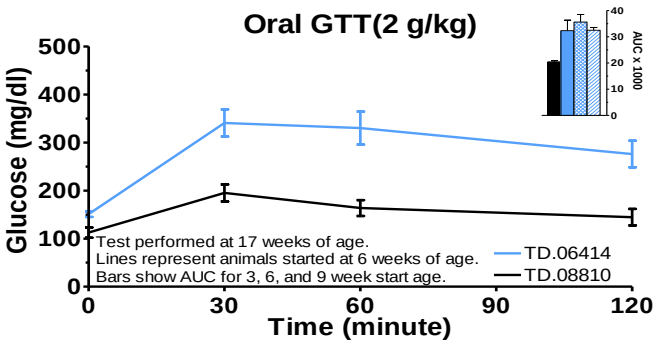
DHR

09/22/15

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







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 ± 0.2	0.8 ± 0.1	0.7 ± 0.1
Non-fasted Leptin (ng/ml, n=20)	37.2 ± 3.9	3.0 ± 0.6	2.5 ± 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 ± 0.6	0.9 ± 0.1	0.8 ± 0.1
Non-fasted Leptin (ng/ml, n=14-20)	*86.9 ± 6.1	5.2 ± 0.8	5.4 ± 0.9

*11 of 16 mice had values greater than the detection limit and were set to 100 ng/ml.

For additional study details, please refer to the **poster on our website**

or contact a nutritionist at **askanutritionist@envigo.com**