

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

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): 36% saturated, 41% monounsaturated, 23% polyunsaturated.

Selected Nutrient Information¹

	% 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)

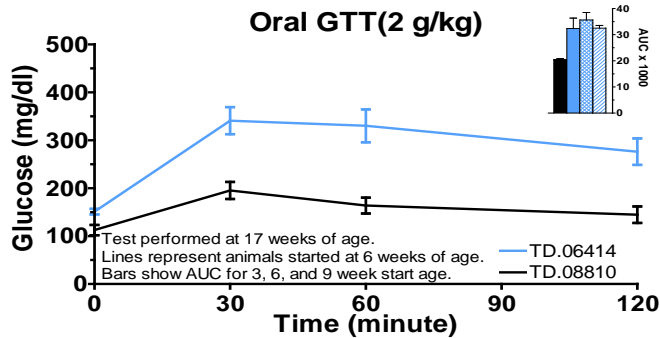
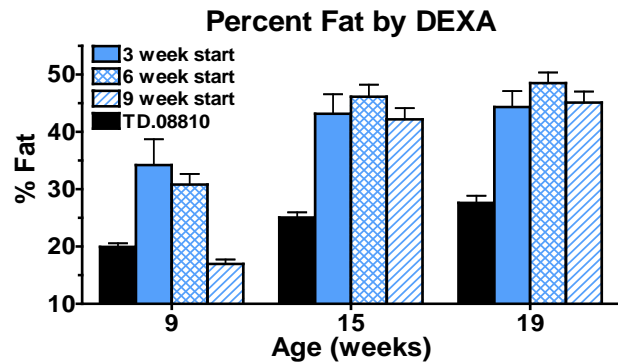
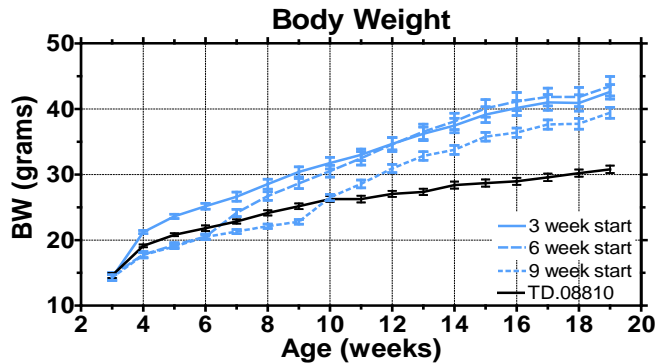
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Place Your Order (USA & Canada)

Please Choose One

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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 \pm SEM.

Additional Phenotype Data

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

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

^tTD.120445 is a replacement for TD.08810 with 6% sucrose and majority of carbohydrate from resistant starch. Additional ingredient matched, low fat control diets are available.

^{tt}Depending on what your main comparisons are, it may be suitable to have a grain-based diet as your control. 2018S is just one of many grain-based Teklad diets.

For additional study details, please refer to the [poster on our website](#)
or contact a nutritionist at askanutritionist@envigo.com