

# **The Impact of Dietary Energy Intake Early in Life on the Colonic Microbiota of Adult Mice**

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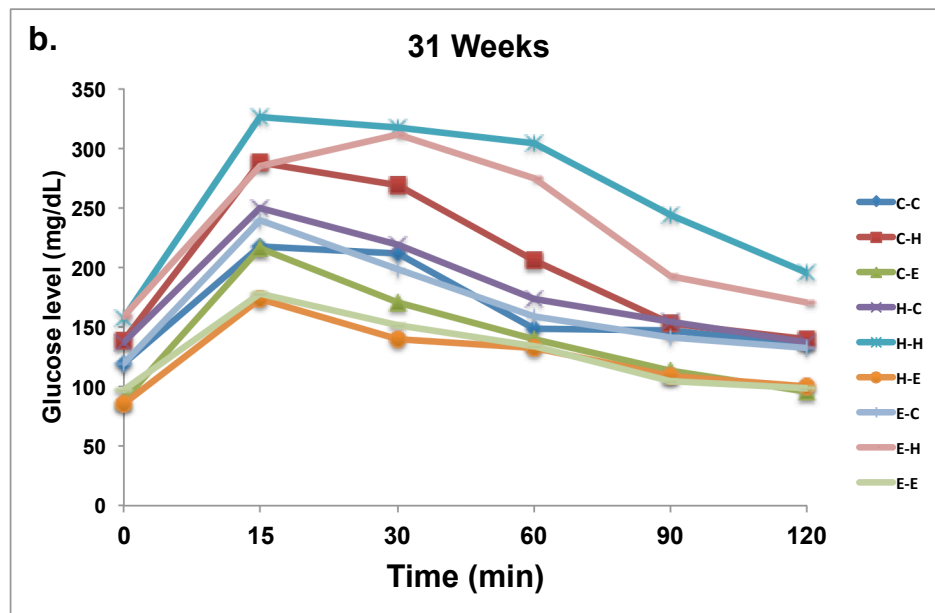
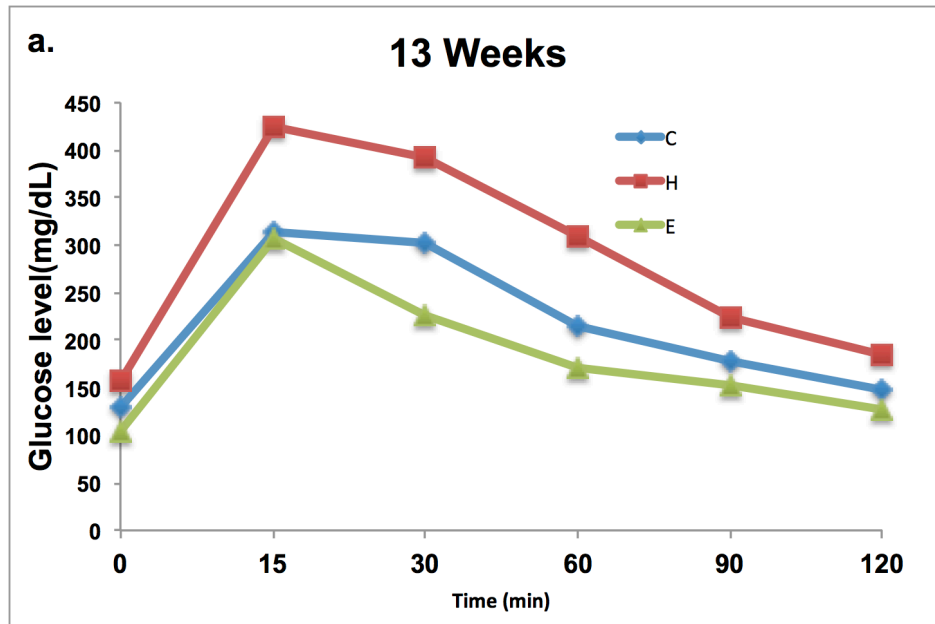
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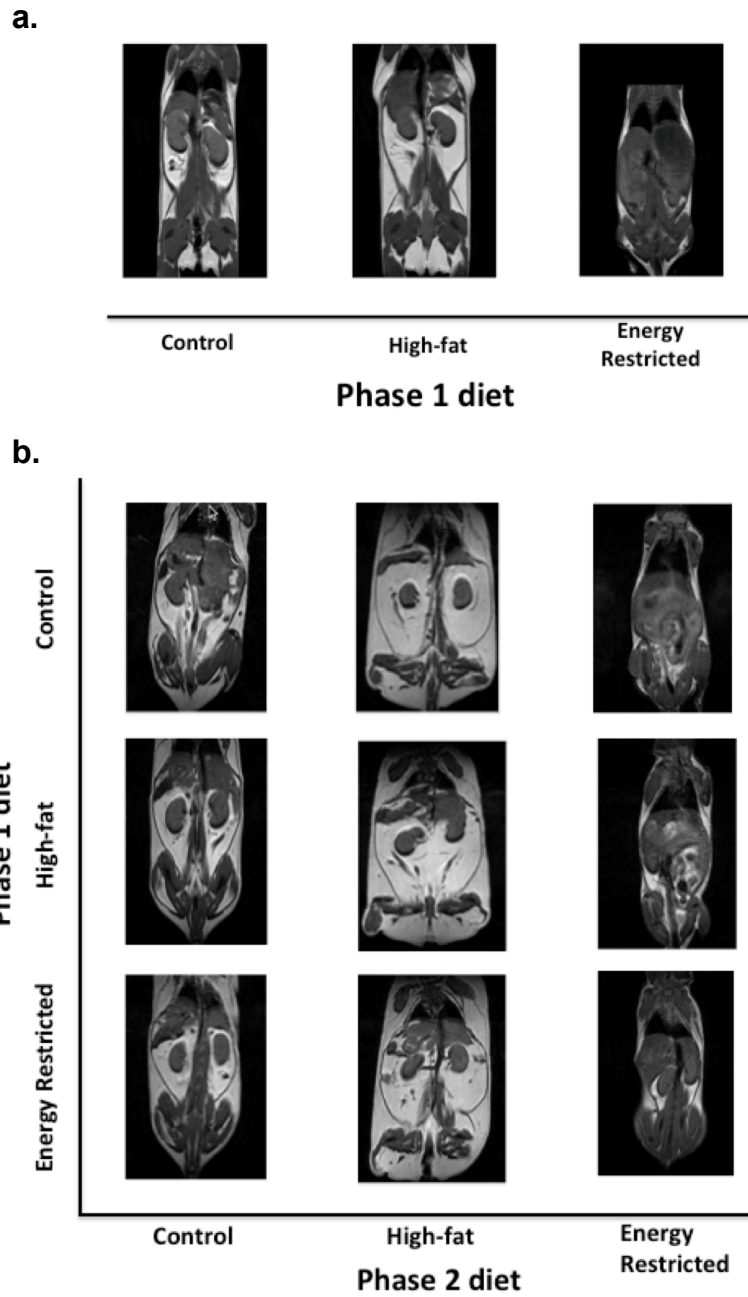
Product	CON		HF		ER	
	gm	kcal	gm	kcal	gm	kcal
Protein	19.2%	20%	23.7%	20%	27.0%	29%
Carbohydrate	67.3%	70%	41.4%	35%	54.0%	57%
Fat	4.3%	10%	23.6%	45%	6.0%	14%
<i>Kcal/gm</i>	3.85		4.73		3.78	
<b>Ingredient (per 1000 g)</b>						
Casein, 80 Mesh	200	800	200	800	200	800
L-Cystine	3	12	3	12	3	12
Corn Starch	315	1 260	72.8	291	197.9	792
Maltodextrin 10	35	140	100	400	0	0
Sucrose	350	1 400	172.8	691	197.9	792
Cellulose, BW200	50	0	50	0	50	0
Soybean Oil	25	225	25	225	25	225
Lard	20	180	177.5	1 598	20	180
Mineral Mix S10026	10	0	10	0	10	0
DiCalcium Phosphate	13	0	13	0	13	0
Calcium Carbonate	5.5	0	5.5	0	5.5	0
Potassium Citrate, 1 H2O	16.5	0	16.5	0	16.5	0
Vitamin Mix V10001	10	40	10	40	10	40
Choline Bitartrate	2	0	2	0	2	0

**Supplementary Table 1. Diet composition and calorie distribution.** The formula<sup>1</sup> to calculate the exact amount of food for mice on ER diet in either phase was provided by the company (Research Diets, Inc. New Brunswick, NJ). To ensure 30% energy restriction is equal for all animals on ER in phase 2, reference animals were the CC (control-control) group.

<sup>1</sup> *The amount of ER diet for each animal/day = 0.71 × the average amount of CON diet consumed by the reference animals in the previous day.*



**Supplementary Figure 1.** Blood glucose levels during glucose tolerance testing. Response to glucose tolerance testing at 13 (a) and 31 (b) weeks of age are shown (n=10). Diet patterns are represented by letter codes C (10% kcal from fat, control diet), H (45% kcal from fat, high fat diet), and E (30% caloric restricted compare to control, caloric restricted diet). Each data point represents the mean blood glucose level per dietary group.



**Supplementary Figure 2.** Magnetic resonance imaging (MRI) showing body fat distribution. Body fat at 15 (a) and 60 (b) weeks of age are shown by MRI. Bright area indicates fat tissue.