
Supplementary information

Fasting-mimicking diet prevents high-fat diet effect on cardiometabolic risk and lifespan

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Supplementary Material

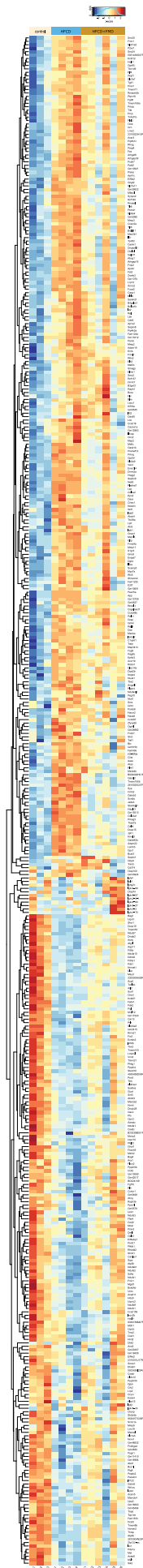
Supplementary Table S1, related to Figure 1. Diet Ingredients and Calorie Content

FMD			D12492- HFCD		D12450J- Control diet	
	Day1	Day2-5	Casein, Lactic, 30 Mesh	200.00 g	Casein, Lactic, 30 Mesh	200.00 g
Broth mix	5.95g	5.31g	Cystine, L	3.00 g	Cystine, L	3.00 g
EVOO	12.75g	0g	Lodex 10	125.00 g	Starch, Corn	506.20 g
Essential FA	0.214g	0g	Sucrose, Fine Granulated	72.80 g	Lodex 10	125.00 g
Synergy Mix -9	14.875g	0g	Solka Floc, FCC200	50.00 g	Sucrose, Fine Granulated	72.80 g
Glycerol (1:1 v/v)	0g	0.75g	Lard	245.00 g	Solka Floc, FCC200	50.00 g
Hydrogel	66.21g	93.94g	Soybean Oil, USP	25.00 g	Soybean Oil, USP	25.00 g
Total:	100g	100g	S10026B	50.00 g	Lard	20.00 g
			Choline Bitartrate	2.00 g	S10026B	50.00 g
			V10001C	1.00 g	Choline Bitartrate	2.00 g
			Dye, Blue FD&C #1, Alum. Lake 35-42%	0.05 g	V10001C	1.00 g
			Total:	773.85 g	Dye, Yellow FD&C #5, Alum. Lake 35-42%	0.04 g
					Dye, Blue FD&C #1, Alum. Lake 35-42%	0.01 g
					Total:	1055.05 g

Caloric Information	Day1	Day2-4	Caloric Information		Caloric Information	
Protein:	6% Kcal	0% Kcal	Protein:	20 % Kcal	Protein:	20 % Kcal
Fat:	64% Kcal	0% Kcal	Fat:	60 % Kcal	Fat:	10 % Kcal
Carbohydrate:	31% Kcal	100% Kcal	Carbohydrate:	20 % Kcal	Carbohydrate:	70 % Kcal
Energy density:	1.88 Kcal/g	0.26 Kcal/g	Energy density:	5.21 Kcal/g	Energy density:	3.82 Kcal/g

Table S2, related to Figure 3, panels c-l. The p values associated with the indicated pairwise comparisons were obtained from two-way ANOVA coupled with Bonferroni's multiple comparisons tests. Only timepoints showing significant p values are shown.

Fig. 3c	Control vs Control+FMD	Fig. 3g	Control vs Control+FMD
Day 3 FMD	< 0.0001	Day 1 FMD	< 0.0001
Day 4 FMD	< 0.0001	Day 2 FMD	< 0.0001
Day 1 post-FMD	< 0.0001	Day 3 FMD	< 0.0001
Day 2 post-FMD	0.0126	Day 4 FMD	< 0.0001
Fig. 3d	HFCD vs HFCD+FMD	Day 3 post-FMD	0.0049
Day 1 post-FMD	0.0238	Day 4 post-FMD	< 0.0001
Day 2 post-FMD	0.037	Day 5 post-FMD	< 0.0001
Day 4 post-FMD	0.0445	Fig. 3h	HFCD vs HFCD+FMD
Day 5 post-FMD	0.0392	Day 1 FMD	0.0384
Fig. 3e	Control vs Control+FMD	Day 2 FMD	0.0003
Day 1 FMD	0.0006	Day 3 FMD	0.0002
Day 2 FMD	<0.0001	Day 4 FMD	0.0001
Day 3 FMD	<0.0001	Day 2 post-FMD	< 0.0001
Day 4 FMD	<0.0001	Fig. 3i	Control vs Control+FMD
Day 4 post-FMD	<0.0001	Day 3 FMD	0.0353
Day 5 post-FMD	<0.0115	Day 4 FMD	0.0044
Fig. 3f	HFCD vs HFCD+FMD	Fig. 3j	HFCD vs HFCD+FMD
Day 1 FMD	0.0054		all ns
Day 2 FMD	< 0.0001	Fig. 3k	Control vs Control+FMD
Day 3 FMD	< 0.0001	Day 2 FMD	0.0038
Day 4 FMD	< 0.0001	Day 3 FMD	0.0003
		Day 4 FMD	0.0001
		Fig. 3l	HFCD vs HFCD+FMD
			all ns



Supplementary Fig 1, related to Figure 5. Heatmap of RNA-Seq expression z-scores in visceral adipose tissue. Heatmap of RNA-Seq expression z-scores computed for differentially expressed genes present in the Control vs. HFCD (BD) pairwise comparison but not found in Control vs. HFCD+FMD (BC). Adj. p.val < 0.05 & abs(logFC) > 1.0 (fold change > 2).