Supplemental Data

(Teupser et al.: *No reduction of atherosclerosis in C-reactive protein (CRP)-deficient mice)*

Supplemental Table S1: Composition and ingredients of low-fat, semi-synthetic diet

Composition	**% Weight**	**% Cal**
Protein	19.2	20
Carbohydrate	67.3	70
Fat	4.3	10
Cholesterol	0.02	0
Ingredients	**% Weight**	**Cal/gram**
Casein, alcohol extracted	19.0	758
L-Cystine	0.28	11
Sucrose	19.0	758
Corn starch	47.4	1895
Cellulose, BW200	4.7	0
Soybean oil	2.37	213
Cocoa butter	1.9	171
Mineral mix S10021	0.95	0
Dicalcium phosphate	1.23	0
Calcium carbonate	0.52	0
Potassium citrate	1.56	0
Vitamin mix V10001	0.95	38
Choline bitartrate	0.19	0
Cholesterol	0.02	0

Calculations are based on estimated metabolizable energy of 4kcal/g (16.7 kJ/g) of protein and carbohydrate and 9 kcal/g (37.7 kJ/g) of lipid. Concentrations of minerals, vitamins and fiber were adjusted to maintain a constant ratio to energy.

Supplemental Table S2: Antibodies and dilutions for immunohistochemistry

	Antibody description/ clone number	Host, Isotype	Dilution	Supplier, catalogue number
Primary antibodies	CD68, FA-11	Rat, IgG_{2a}	1:10	AbD Serotec, MCA1957
	Complement C3, 11H9	Rat, IgG_2a	1:50	Abcam, ab11862
	α-SMA	Rabbit, IgG	1:200	Abcam, ab5694
Secondary antibodies	Anti-rat-HRP-conjugated	Goat, IgG	1:50	AbD Serotec, STAR72
	Anti-rabbit-HRP-conjugated	ImmPRESS Reagent, Ig	Undiluted	VECTOR Laboratories

Abcam, Cambridge, UK; AbD Serotec, Oxford, UK; Vector Laboratories; VECTOR Laboratories, Burlingame, Canada

Supplemental Table S3: Effect of CRP-deficiency on lipids and lipoproteins in ApoE$^{-/-}$ and LDLR$^{-/-}$ mice

ApoE$^{-/-}$ mice at 16 weeks of age:

Gender	Parameter	CRP$^{+/+}$	CRP$^{+/-}$	CRP$^{-/-}$
males	Cholesterol (mg/dL)	425 ± 169	451 ± 123	513 ± 111
	Triglycerides (mg/dL)	192 ± 166	199 ± 134	145 ± 95
	HDL-cholesterol (mg/dL)	25 ± 7	22 ± 6	19 ± 4
females	Cholesterol (mg/dL)	508 ± 107	457 ± 79	458 ± 73
	Triglycerides (mg/dL)	128 ± 52	120 ± 80	94 ± 39
	HDL-cholesterol (mg/dL)	20 ± 4*	19 ± 4§	14 ± 3*§

* $p<0.001$ CRP$^{+/+}$ vs. CRP$^{-/-}$, § $p<0.01$ CRP$^{+/-}$ vs. CRP$^{-/-}$.

ApoE$^{-/-}$ mice at 12 weeks of age:

Gender	Parameter	CRP$^{+/+}$	CRP$^{+/-}$	CRP$^{-/-}$
males	Cholesterol (mg/dL)	414 ± 102	448 ± 52	474 ± 80
	Triglycerides (mg/dL)	178 ± 63	151 ± 89	143 ± 96
	HDL-cholesterol (mg/dL)	24 ± 11	20 ± 4	27 ± 9
females	Cholesterol (mg/dL)	456 ± 162	438 ± 81	427 ± 65
	Triglycerides (mg/dL)	225 ± 98*§	102 ± 58§	104 ± 80*
	HDL-cholesterol (mg/dL)	14 ± 5$^{\dagger\#}$	22 ± 4†	21 ± 6$^{\#}$

* $p<0.01$ CRP$^{+/+}$ vs. CRP$^{-/-}$, § $p<0.05$ CRP$^{+/-}$ vs. CRP$^{-/-}$, † $p<0.05$ CRP$^{+/+}$ vs. CRP$^{+/-}$,
$^{\#}$ $p<0.05$ CRP$^{+/+}$ vs. CRP$^{-/-}$.

LDLR$^{-/-}$ mice at 20 weeks of age:

Gender	Parameter	CRP$^{+/+}$	CRP$^{+/-}$	CRP$^{-/-}$
males	Cholesterol (mg/dL)	419 ± 102*	515 ± 230	564 ± 158*
	Triglycerides (mg/dL)	198 ± 107§	289 ± 143	327 ± 134§
	VLDL-cholesterol (mg/dL)	22 ± 23*†	58 ± 56†	68 ± 31*
	LDL-cholesterol (mg/dL)	296 ± 122*	391 ± 183	460 ± 122*
	HDL-cholesterol (mg/dL)	79 ± 14	83 ± 41	85 ± 21
females	Cholesterol (mg/dL)	527 ± 175	612 ± 135	615 ± 207
	Triglycerides (mg/dL)	188 ± 75	263 ± 83	212 ± 85
	VLDL-cholesterol (mg/dL)	88 ± 59	126 ± 48	124 ± 100
	LDL-cholesterol (mg/dL)	369 ± 73	454 ± 79	431 ± 134
	HDL-cholesterol (mg/dL)	46 ± 19	49 ± 18	46 ± 24

- $p<0.01$ CRP$^{+/+}$ vs. CRP$^{-/-}$, § $p<0.05$ CRP$^{+/+}$ vs. CRP$^{-/-}$, † $p<0.05$ CRP$^{+/+}$ vs. CRP$^{+/-}$,

Supplemental Table S4: Effect of genotype on lesion size in male LDLR-/- mice with and without adjustment to lipid parameters (total cholesterol, total triglycerides, LDL-cholesterol, VLDL-cholesterol).

Anatomical site	Adjustment for lipid parameters	CRP Genotype (males on $LDLR^{-/-}$ background)						Overall p-value (ANOVA)
		+/+		-/+		-/-		
		Mean (µm²)	SD (µm²)	Mean (µm²)	SD (µm²)	Mean (µm²)	SD (µm²)	
BCA	no	4187	3895	7669	15631	8535	9341	0.566
	yes	7883	5921	5501	6908	6994	6892	0.234
Aortic root	no	61443	34089	84372	40604	83150	45282	0.662
	yes	68113	25328	80976	33104	78747	34266	0.512