



Supplemental Figure 1. Representative HPLC chromatograms showing increased hepatic *cis* isomers relative to all-*trans* lycopene in CMO I KO compared to CMO I WT mice fed lycopene diet for 60 d.

Online Supporting Material

Supplemental Table 1. Initial body weights, final body weights, serum cholesterol, serum triglycerides, liver weight, liver lipids, and hepatic cholesterol concentrations in CMO I WT and CMO I KO mice following consumption of placebo,  $\beta$ -carotene, or lycopene diets for 60 d<sup>1</sup>.

Group	Pl-WT	Pl-KO	$\beta$ C-WT	$\beta$ C-KO	Lyc-WT	Lyc-KO
Initial Body Weight (g)	25.9 $\pm$ 1.3 (13)	25.6 $\pm$ 1.4 (12)	25.4 $\pm$ 1.0 (14)	27.2 $\pm$ 1.8 (13)	25.7 $\pm$ 1.2 (14)	25.5 $\pm$ 1.3 (12)
Final Body Weight (g)	28.6 $\pm$ 1.6 (13)	30.0 $\pm$ 12 (12)	28.7 $\pm$ 1.3 (14)	31.5 $\pm$ 2.1 (13)	28.4 $\pm$ 1.5 (14)	29.1 $\pm$ 1.6 (12)
Serum Cholesterol (mmol/L)	3.9 $\pm$ 0.2 (13)	3.9 $\pm$ 0.2 (12)	4.2 $\pm$ 0.2 (14)	3.9 $\pm$ 0.2 (13)	4.5 $\pm$ 0.2 (14)	3.3 $\pm$ 0.2 (12)
Serum Triglycerides (mmol/L)	0.22 $\pm$ 0.01 (12)	0.27 $\pm$ 0.02 (13)	0.24 $\pm$ 0.01 (12)	0.26 $\pm$ 0.02 (12)	0.22 $\pm$ 0.01 (12)	0.23 $\pm$ 0.01 (10)
Liver Weight (% body weight)	7.1 $\pm$ 0.2 (13)	7.2 $\pm$ 0.4 (12)	6.4 $\pm$ 0.2 (14)	7.3 $\pm$ 0.4 (13)	6.9 $\pm$ 0.2 (14)	6.6 $\pm$ 0.3 (12)
Liver Lipids (% liver weight)	7.3 $\pm$ 0.3 (14)	6.9 $\pm$ 0.5 (12)	7.3 $\pm$ 0.3 (15)	7.6 $\pm$ 0.6 (12)	6.2 $\pm$ 0.5 (13)	7.1 $\pm$ 0.6 (13)
Hepatic Cholesterol ( $\mu$ mol/g)	45.5 $\pm$ 2.8 (13)	43.7 $\pm$ 2.7 (12)	43.1 $\pm$ 4.2 (14)	44.0 $\pm$ 4.7 (12)	39.2 $\pm$ 4. (14)	44.1 $\pm$ 5. (11)

<sup>1</sup> Means  $\pm$  SEM, ( ) number of samples analyzed