

Figure S1

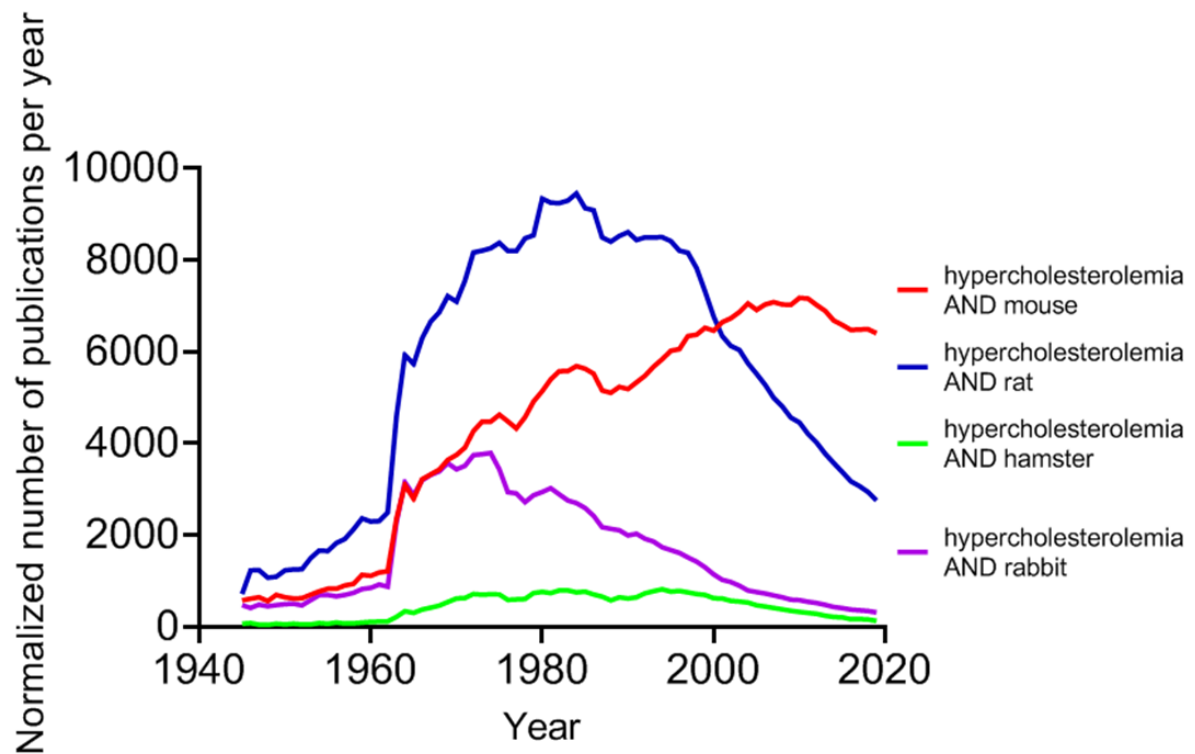


Figure S1. Bibliometric analysis of PubMed Indexed publications on hypercholesterolemia in common laboratory animals.

Normalized number of publications per 100000 publications per year from PubMed searches(<https://esperr.github.io/pubmed-by-year/>)

Figure S2

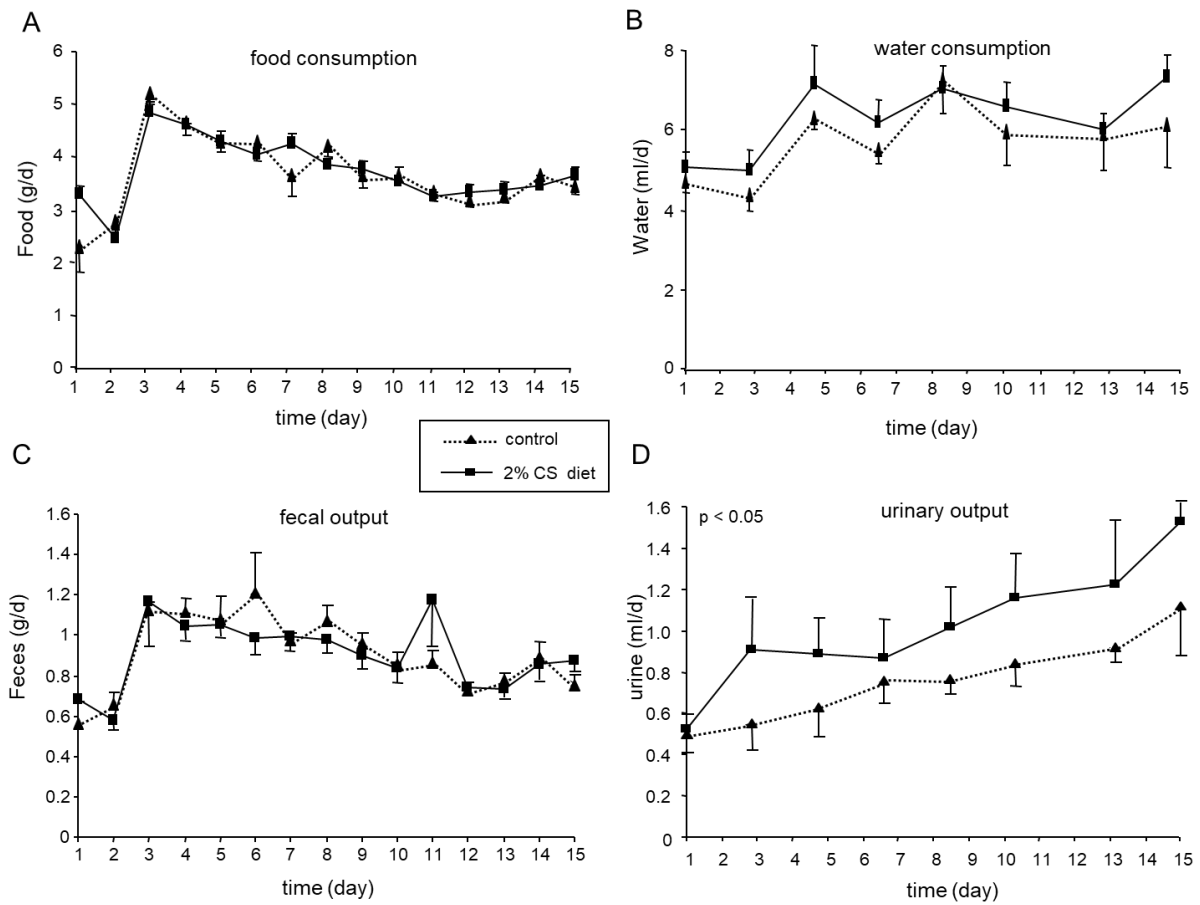


Figure S2. Assessment of food and water consumption along with fecal and urinary outputs in cholesterol-fed mice.

8 weeks-old mice fed a standard diet (control) or a 2% cholesterol-enriched diet for 15 days (2% CS) were housed in metabolic cages. (A) Food and (B) water intake were monitored daily as well as (C) fecal and (D) urinary outputs. Graphs represent mean \pm s.e.m (n=8 per group). $P < 0.05$ determined by ANOVA2 with repeated measures.

Figure S3

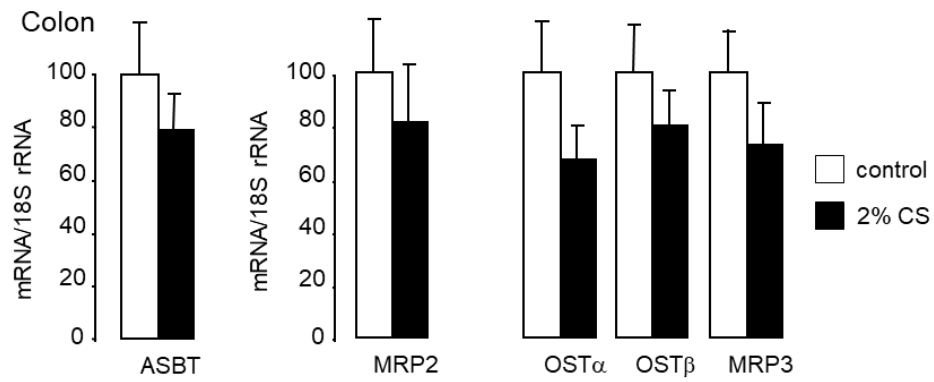


Figure S3. Gene expression of colon bile acid transporters in cholesterol-fed mice.

mRNA levels of bile acid transporters in the colon of standard diet (control) or 2% cholesterol-fed (2% CS) mice. Bar graphs represent mean \pm s.e.m (n=8 per group).

Table S1. Composition of liver bile acid pool in control and cholesterol-fed mice.

Mean \pm s.e.m (n=8 per group). *P* value were determined by Student's t-test with Welch's correction.

	Heuman's Hydrophobicity Index (HI)	Intrahepatic concentration (ng/mg)		<i>T</i> -test	Percentage (%)		<i>T</i> -test
		Ctrl	2% CS	<i>P</i> value	Ctrl	2% CS	<i>P</i> value
LCA	+1	1.07 \pm 0.18	1.21 \pm 0.17	0.59	1.20 \pm 0.26	1.01 \pm 0.11	0.49
DCA	+ 0,59	2.10 \pm 0.99	3.22 \pm 0.71	0.37	2.06 \pm 0.88	2.66 \pm 0.6	0.58
CDCA	+0,46	4.84 \pm 0.95	5.81 \pm 0.48	0.36	5.03 \pm 0.68	4.90 \pm 0.3	0.86
CA	0	41.13 \pm 6.4	34.34 \pm 3.55	0.36	43.64 \pm 5.01	29.07 \pm 2.75	0.025
HDCA	-0,35	1.23 \pm 0.14	1.15 \pm 0.28	0.81	1.35 \pm 0.2	0.93 \pm 0.18	0.16
β -MCA	-0,78	33.26 \pm 4.96	62.98 \pm 4.69	0.002	36.40 \pm 5.52	53.23 \pm 3.45	0.025
α -MCA	-0,84	9.52 \pm 1.03	9.70 \pm 1.47	0.92	10.19 \pm 0.93	8.08 \pm 0.99	0.16
Primary BA	/	88.85 \pm 5.53	115.16 \pm 4.97	0.009	95.38 \pm 0.74	95.17 \pm 0.80	0.99
Secondary BA	/	4.40 \pm 0.92	5.97 \pm 1.04	0.41	4.62 \pm 0.74	4.83 \pm 0.80	0.99
Primary BA/Secondary BA	/	22,8 \pm 3,49	24,75 \pm 6,73	0,750	/	/	/
Total	/	93.25 \pm 6.15	118.55 \pm 5.66	0.014	100	100	/

Table S2. Composition of fecal bile acid pool in control and cholesterol-fed mice.

Mean \pm s.e.m (n=8 per group). *P* value were determined by Student's t-test with Welch's correction.

	Heuman's Hydrophobicity Index (HI)	Fecal excretion (μ g/days)		<i>T</i> -test	Percentage (%)		<i>T</i> -test
		Ctrl	2% CS	<i>P</i> value	Ctrl	2% CS	<i>P</i> value
LCA	+1	9.44 \pm 0.46	25.38 \pm 5.11	0.01	3.77 \pm 0.22	4.47 \pm 0.74	0.4
DCA	+ 0,59	174.94 \pm 13.84	295.11 \pm 29.33	0.004	68.61 \pm 1.2	53.35 \pm 2.58	0.0003
CDCA	+0,46	4.41 \pm 0.38	10.04 \pm 2.281	0.03	1.74 \pm 0.1	1.73 \pm 0.35	0.9
CA	0	14.48 \pm 1.82	50.02 \pm 16.15	0.05	5.64 \pm 0.45	8.92 \pm 2.83	0.3
HDCA	-0,35	2.97 \pm 0.18	8.52 \pm 1.89	0.01	1.19 \pm 0.11	1.48 \pm 0.25	0.3
β -MCA	-0,78	36.11 \pm 3.17	110.77 \pm 7.96	0.55x10⁻⁵	14.21 \pm 0.97	20.39 \pm 1.43	0.005
α -MCA	-0,84	12.29 \pm 0.9	54.86 \pm 7.88	0.0003	4.83 \pm 0.11	9.65 \pm 0.88	0.0003
Primary BA	/	67.3 \pm 5.62	225.7 \pm 24.2	0.8x10⁻⁴	26.43 \pm 1.25	40.69 \pm 3.03	0.001
Secondary BA	/	187.35 \pm 14.14	329.01 \pm 34.58	0.003	73.57 \pm 1.25	59.31 \pm 3.03	0.001
Primary BA/Secondary BA	/	0.36 \pm 0.02	0.71 \pm 0.1	0,008	/	/	/
Total	/	254.65 \pm 18.74	554.71 \pm 48.14	0.0002	100	100	/