

Supplemental Tables:

Supplemental Table S2. List of RT-qPCR primers used in this study.

Gene	Organism	Forward primer (5' -> 3')	Reverse primer (5' -> 3')
<i>bsh</i>	<i>B. longum</i>	CGTCCAAGACCAACACCTATTA	GAGCTCCGAGGAATCCATATC
<i>ldhl</i>	<i>B. longum</i>	CCACGAAGCTTGCTGTTATTG	GCTCCTTGCGGATGTCTT
<i>FXR</i>	Human	AACCATACTCGCAATACAGCAA	ACAGCTCATCCCCTTTGATCC
<i>FGF19</i>	Human	CCAGAAGACAGGCAGTAGT	CTGGAGGGATTGGGAAGG
<i>SHP</i>	Human	CCCCAAGGAATATGCCTGCC	TAGGGCGAAAGAAGAGGTCCC
<i>BSEP</i>	Human	AGCCACACAGACCAGGATGTTG	CAATGAACCGCCTCTCCTTTCC
<i>IBABP</i>	Human	AGTTCACTGTTGGCAAGGAAAGC	CACGATCTCTGAGGTCTGGTGA
<i>OSTα</i>	Human	TCTTCCTGGAGGATGCCGTCTA	TCCAGAGACCAAAGCAGCACAG
<i>OSTβ</i>	Human	ATGGTCCTCCTGGGAAGAAGCA	GCCTCATCCAAATGCAGGACTTC
<i>CAR</i>	Human	GCAGAAGTGCTTAGATGCTGGC	GCTCCTTACTCAGTTGCACAGG
<i>CYP2B6</i>	Human	AGACGCCTTCAATCCTGACC	CCTTCACCAAGACAAATCCGC
<i>PXR</i>	Human	TGCGAGATCACCCGGAAGAC	ATGGGAGAAGGTAGTGTCAAAGG
<i>CYP3A4</i>	Human	CCAAGCTATGCTCTTCACCG	TCAGGCTCCACTTACGGTGC
<i>CYP1A1</i>	Human	TACCTCAGCCACCTCCAAGAT	GAGGTCTTGAGGCCCTGAT

Supplemental Table S3. MRM transitions for quantification of conjugated bile acids by LC-MS/MS.

Bile Acid	m/z of Parent [M+H] ⁺	m/z of Daughter [M+H] ⁺	RT (min)	Collision Energy (V)	Internal Standard
Glycodeoxycholic Acid (GDCA)	450.3214	76.0393	10.36	35	GDCA-d4
Glycocholic Acid (GCA)	466.3163	76.0393	7.95	35	GCA-d4
Alanine-CA	480.3320	90.0550	8.44	35	GCA-d4
Serine-CA	496.3269	106.0499	7.48	30	GCA-d4
Taurodeoxycholic Acid (TDCA)	500.3040	126.0219	10.12	35	GDCA-d4
Isoleucine-DCA	506.3840	132.1019	11.11	35	GDCA-d4
Leucine-DCA	506.3840	132.1019	11.12	35	GDCA-d4
Threonine-CA	510.3425	120.0655	7.97	30	GCA-d4
Taurocholic Acid (TCA)	516.2990	126.0219	7.64	35	GDCA-d4
Lysine-DCA	521.3949	147.1128	10.33	35	GDCA-d4
Glutamate-DCA	522.3425	148.0604	10.11	35	GDCA-d4
Isoleucine-CA	522.3789	132.1019	10.62	35	GCA-d4
Leucine-CA	522.3789	132.1019	10.67	35	GCA-d4
Methionine-DCA	524.3404	150.0583	10.86	35	GDCA-d4
Histidine-DCA	530.3588	156.0768	9.64	35	GDCA-d4

Lysine-CA	537.3898	147.1128	7.93	35	GCA-d4
Glutamate-CA	538.3374	148.0604	7.94	35	GCA-d4
Phenylalanine-DCA	540.3684	166.0863	11.10	35	GDCA-d4
Histidine-CA	546.3538	156.0768	7.05	35	GCA-d4
Tyrosine-DCA	556.3633	182.0812	10.57	35	GDCA-d4
Phenylalanine-CA	556.3633	166.0863	10.62	35	GCA-d4
Arginine-CA	565.3960	175.1190	7.16	35	GCA-d4
Tyrosine-CA	572.3582	182.0812	8.59	35	GCA-d4
Tryptophan-DCA	579.3792	205.0972	11.00	35	GDCA-d4
Tryptophan-CA	595.3742	205.0972	10.46	35	GCA-d4
GDCA-d4	454.3465	76.0393	10.36	35	
GCA-d4	470.3414	76.0393	7.95	35	
TDCA-d4	504.3292	126.0219	10.12	35	
TCA-d4	520.3241	126.0219	7.64	35	