

Supplementary Table 1. Amounts of SCFAs and organic acids in faeces.

SCFAs and organic acids	Control (nmol / g faeces) Average \pm Standard deviation	PHGG (nmol / g faeces) Average \pm Standard deviation	<i>P</i> value
Acetic acid	22326.6 \pm 3794.6	25358.5 \pm 4016.5	N.S.
Butyric acid	3552.0 \pm 3159.8	5069.7 \pm 1896.2	N.S.
Propionic acid	2864.9 \pm 876.8	4916.5 \pm 1171.9	**
Formic acid	794.6 \pm 259.9	343.4 \pm 226.0	**
Valeric acid	556 \pm 263.9	1049.8 \pm 325.0	**
Isobutyric acid	160.8 \pm 51.0	139.8 \pm 66.9	N.S.
Isovaleric acid	97.4 \pm 41.6	75.9 \pm 34.1	N.S.
Total SCFAs	30352.4 \pm 5394.8	36953.6 \pm 6220.8	*
Succinic acid	278.7 \pm 166.7	386.3 \pm 261.4	N.S.
Lactic acid	188.1 \pm 279.0	21.6 \pm 20.8	N.S.

Average values \pm standard deviation for each SCFA (and organic acid) and group are shown.

Comparisons of the two groups were performed by Wilcoxon Rank Sum test and *P* values are shown on the right. *, *P* < 0.05 **, *P* < 0.01, N.S., no significant differences.

Supplementary Table 2. Amounts of bile acids in faeces.

Bile acids	Control (nmol / g faeces) Average \pm Standard deviation	PHGG (nmol / g faeces) Average \pm Standard deviation	<i>P</i> value
DCA	81.75 \pm 40.88	82.62 \pm 15.81	N.S.
LCA	78.44 \pm 22.75	92.66 \pm 8.92	N.S.
CA	8.25 \pm 5.33	5.24 \pm 1.74	N.S.
UDCA	0.38 \pm 0.25	0.69 \pm 0.29	*
a-MCA/ w-MCA	0.29 \pm 0.45	0.19 \pm 0.11	N.S.
CDCA	0.06 \pm 0.14	0.03 \pm 0.09	N.S.
TCDCA	0.04 \pm 0.04	0.02 \pm 0.03	N.S.
b-MCA	0.03 \pm 0.09	0.00 \pm 0.00	N.S.
GDCA	0.02 \pm 0.03	0.02 \pm 0.03	N.S.
TLCA	0.01 \pm 0.02	0.03 \pm 0.05	N.S.
TDCA	0.01 \pm 0.03	0.02 \pm 0.05	N.S.

Average values \pm standard deviation for each faecal bile acid and group are shown. Comparisons of the two groups were performed by Wilcoxon Rank Sum test and *P* values are shown on the right. *, *P* < 0.05, N.S., no significant differences.

Supplementary Table 3. Concentration of bile acids in serum.

Bile acids	Control (nM) Average \pm Standard deviation	PHGG (nM) Average \pm Standard deviation	<i>P</i> value
CA	15220.3 \pm 4298.1	16868.7 \pm 4531.1	N.S.
DCA	1329.9 \pm 219.0	1848.5 \pm 329.4	**
GCDCA	39.2 \pm 110.9	157.2 \pm 261.1	N.S.
GDCA	N.D.	57.8 \pm 163.5	N.S.
GCA	N.D.	183.4 \pm 518.8	N.S.

Average values \pm standard deviation for each serum bile acid and group are shown.

Comparisons of the two groups were performed by Wilcoxon Rank Sum test and *P* values are shown on the right. **, *P* < 0.01, N.S., no significant differences.