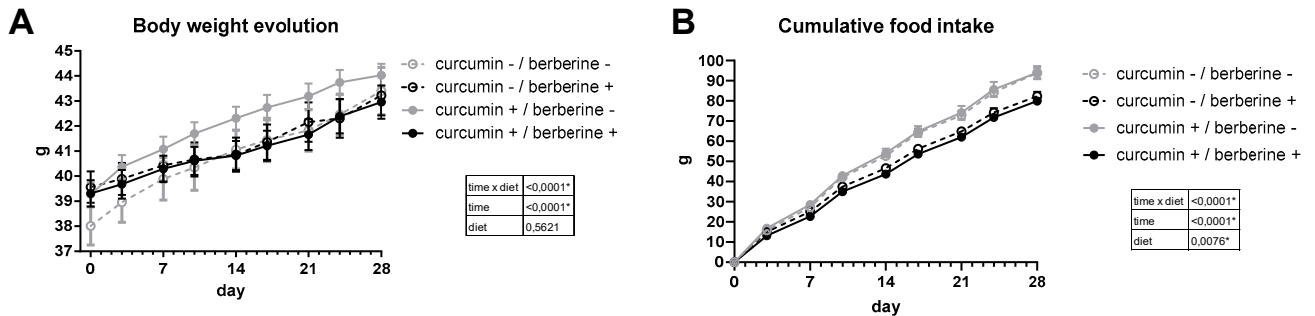


Supplementary Figure 1. Body weight evolution and cumulative food intake



*Ob/ob* mice were fed a standard diet supplemented with or without berberine (bb) or curcumin (cc) for 4 weeks (A: n=9 for each group; B: n=3 for each group). \*p<0.05 (two-way ANOVA).

Supplemental table S1. Primers used in RT-qPCR

Gene Symbol	Gene Name	Forward Primer	Reverse Primer
<i>Ccl2</i>	Chemokine (C-C motif) ligand 2	GCAGTTAACGCCCACTCA	TCCAGCCTACTCATTGGGATCA
<i>Ifng</i>	Interferon gamma	AGCGGCTGACTGAAGTCAGATTGTAG	GTCACAGTTTTCAGCTGTATAGGG
<i>Il1β</i>	Interleukin 1 beta	TCGCTCAGGGTCACAAGAAA	CATCAGAGGCAAGGAGGAAAAC
<i>IL6</i>	Interleukin 6	ACAAGTCGGAGGCTTAATTACACAT	TTGCCATTGCACAACTCTTTTC
<i>Itgax (Cd11c)</i>	Integrin alpha X	CAAAATCTCCAACCCATGCT	TGTGGTCAGCTCCACAGTTC
<i>Lyz</i>	Lysozyme	GCCAAGGTCTACAATCGTTGTGAGTTG	CAGTCAGCCAGCTTGACACCACG
<i>Muc2</i>	Mucin 2	ATGCCACCTCCTCAAAGAC	GTAGTTTCCGTTGGAACAGTGAA
<i>Ocln</i>	Occludin	ATGTCCGGCCGATGCTCTC	TTTGGCTGCTCTTGGGTCTGTAT
<i>Nox1</i>	NADPH-oxidase	TTGGGTCAGCACTGGCTCTG	TGGCGGTGTGCAGTGCTATC
<i>Pla2g2a</i>	Phospholipase A2g2	AAGGATCCCCCAAGGATGCCAC	CAGCCGTTTCTGACAGGAGTTCTGG
<i>Gcg</i>	Preproglucagon	TGGCAGCACGCCCTTC	GCGCTTCTGTCTGGGA
<i>Pyy</i>	Peptide YY	GTTTGGACCAGTGGTGAAGA	TGCCCTCTTCTTAAACCAAACA
<i>Reg3g</i>	regenerating islet-derived 3-gamma	TTCCTGTCCTCCATGATCAAA	CATCCACCTCTGTTGGGTTC
<i>Rpl19</i>	Ribosomal protein L19	GAAGGTCAAAGGGAATGTGTTCA	CCTTGCTGCTTCAGCTTGT
<i>Tjp1</i>	Tight junction protein 1	TTTTTGACAGGGGGAGTGG	TGCTGCAGAGGTCAAAGTTCAAG
<i>Tlr4</i>	Toll-like receptor 4	CCCTCAGCACTCTTGATTGC	TGCTTCTGTTCTTGACCCA
<i>Tnf</i>	Tumor Necrosis Factor	TCGAGTGACAAGCCTGTAGCC	TTGAGATCCATGCCGTTGG
<i>Akkermansia spp.</i>		CAGCACGTGAAGGTGGGGAC	CCTTGCGGTTGGCTTCAGAT
<i>Bacteroides spp.</i>		GGTGTCCGCTTAAGTGCCAT	CGGA(C/T)GTAAGGGCCGTGC
<i>Bifidobacterium spp.</i>		GATTCTGGCTCAGGATGAACGC	CTGATAGGACGCGACCCCAT
<i>Lactobacillus spp.</i>		AGCAGTAGGGAATCTTCCA	CACCGCTACACATGGAG
<i>Total bacteria</i>		ACTCCTACGGGAGGCAGCAG	ATTACCGCGGCTGCTGG

**Supplementary Table S2.** Colonic mRNA levels coding for proteins or peptides involved in the regulation of innate immunity, gut barrier and/or inflammation

Relative expression	cc-/bb-	cc-/bb+	cc+/bb-	cc+/bb+
<i>Reg3g</i>	1.00 ± 0.28 <sup>a</sup>	0.11 ± 0.05 <sup>b</sup>	0.45 ± 0.18 <sup>ab</sup>	0.13 ± 0.04 <sup>b</sup>
<i>Lyz</i>	1.00 ± 0.08	0.79 ± 0.08	1.65 ± 0.41	1.07 ± 0.15
<i>Tjp1</i>	1.00 ± 0.03	1.03 ± 0.04	1.07 ± 0.06	0.98 ± 0.03
<i>Ocln</i> <sup>#</sup>	1.00 ± 0.04 <sup>a</sup>	0.90 ± 0.03 <sup>ab</sup>	0.82 ± 0.03 <sup>b</sup>	0.78 ± 0.04 <sup>b</sup>
<i>Tnf</i>	1.00 ± 0.09	1.11 ± 0.08	2.08 ± 0.77	1.26 ± 0.16
<i>Il1b</i> <sup>§</sup>	1.00 ± 0.12	1.14 ± 0.10	1.55 ± 0.27	0.97 ± 0.89
<i>Il6</i>	1.00 ± 0.08	1.11 ± 0.08	1.18 ± 0.07	1.16 ± 0.09
<i>Ifng</i>	1.00 ± 0.12	2.12 ± 0.42	2.18 ± 0.42	2.14 ± 0.43

*Ob/ob* mice were fed a standard diet supplemented with or without berberine or curcumin for 4 weeks (n=9 for each group). <sup>#</sup>p<0.05 for curcumin effect, <sup>§</sup>p<0.05 for interaction effect (two-way ANOVA). Data with different superscript letters are significantly different at p<0.05 (Tukey post-hoc test).