

Supplementary Materials

Table S1 Primer sequences

Gene	Sequences
<i>Gapdh</i>	F-5'-TCCTGCACCACCAACTGCT-3'
	R-5'-GTCAGATCCACGACGGACACA-3'
<i>Nr3c1</i>	F-5'-CCGGGTCCCCAGGTAAAGA-3'
	R-5'-TGTCCGGTAAAATAAGAGGCTTG-3'
<i>c-fos</i>	F-5'-CGGGTTTCAACGCCGACTA-3'
	R-5'-TTGGCACTAGAGACGGACAGA-3'
<i>TPH1</i>	F-5'-AACAAAGACCATTCTCCGAAAG-3'
	R-5'-TGTAACAGGCTCACATGATTCTC-3'
<i>AQP8</i>	F-5'-ACACCAATGTGTAGTATGGACCT-3'
	R-5'-TGACCGATAGACATCCGATGAAG-3'
<i>BNDF</i>	F-5'-TGCAGGGGCATAGACAAAAGG-3'
	R-5'-CTTATGAATCGCCAGCCAATTCTC-3'

Table S2 Sample size for each experiment

	Male				Female			
	CON		CCFM1025		CON		CCFM1025	
	NS	MS	NS	MS	NS	MS	NS	MS
Forced Swim Test	12	11	7	6	16	16	17	13
Hippocampus BDNF	7	6	7	7	7	7	6	7
Hippocampus <i>NR3C1</i>	6	6	6	8	8	6	5	5
Hypothalamus CRH	7	7	7	7	7	7	7	7
Serum CORT	7	7	7	7	7	7	7	7
Defecation time	10	12	7	9	17	18	17	16
Colonic <i>c-Fos</i>	7	8	7	7	7	6	8	6
Colonic SP	7	7	7	7	7	7	7	7
Serum ACh	7	8	6	7	7	8	7	6
Colonic <i>TPH1</i>	8	8	5	10	6	5	6	5
Colonic Trp	7	7	5	6	6	7	6	6
Colonic 5-HTP	7	7	5	5	6	7	5	8
Colonic 5-HT	6	6	4	6	7	8	6	8
Colonic 5-HIAA	7	7	6	6	6	7	6	8
Water content of faeces	15	12	13	12	7	7	6	5
Colonic <i>AQP8</i>	8	8	5	10	6	5	6	5
Total SCFAs	63	59	46	69	39	36	39	36

Figure S1 Transcriptional level of hippocampal *bdnf*

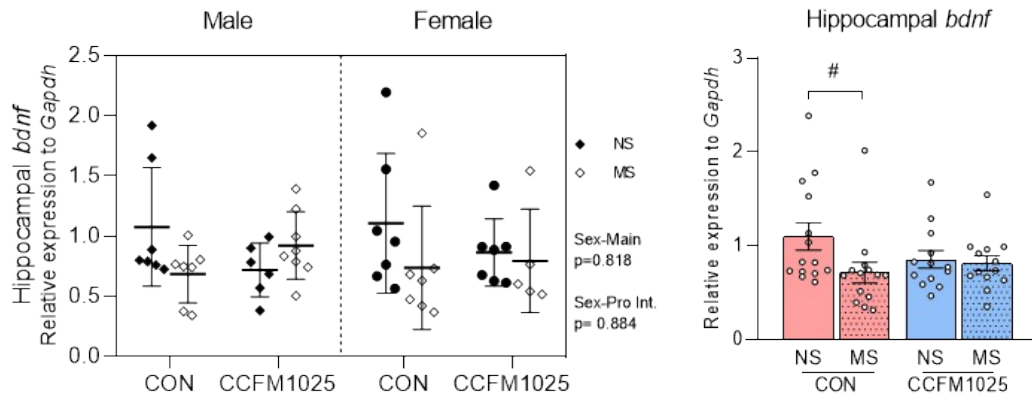


Figure S2 The concentration of each SCFA

