**Online Supplementary Material 2**: Oligonucleotide concentrations, sequences as well as quantitative real-time PCR cycling conditions

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| Target | Oligonucleotide concentrations | Sequence 5' – 3' | Cycling conditions | Reference |
| Total bacteria | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | CTT GTA CAC ACC GCC CGT CCGG TGA ATA CGT TCC CGGTAC GGC TAC CTT GTT ACG ACT T | 95 °C for 10 min; 45 cycles of 95 °C for 30sec and 60 °C for 1 min | (1) |
| Bifidobacteriumspp.  | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | CTC CTG GAA ACG GGT GCGG GTG AGT AAT GCG TGA CCTGA TAG GAC GCG ACC CCA | 95 °C for 10 min; 45 cycles of 95 °C for 30sec and 60 °C for 1 min | (1) |
| C. coccoides group  | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | CGG TAC CTG ACT AAG AAGGAC GCC GCG TGA AGG AAGC CCC AGC CTT TCA CAT C | 95 °C for 10 min; 45 cycles of 95 °C for 30sec and 60 °C for 1 min | (1) |
| C. leptum group  | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | CAC AAT AAG TAA TCC ACCCCT TCC GTG CCG CAG TTAGAA TTA AAC CAC ATA CTC CAC TGC TT | 95 °C for 10 min; 45 cycles of 95 °C for 30sec and 60 °C for 1 min | (1) |
| Bacteroides/Prevotella  | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | AAG GTC CCC CAC ATT GCCT TCG ATG GAT AGG GGT TCAC GCT ACT TGG CTG GTT CAG | 95 °C for 10 min; 45 cycles of 95 °C for 30sec and 60 °C for 1 min | (1) |
| E. coli  | probe: 250 nMforward primer: 900nMreverse primer: 900 nM | TAT TAA CTT TAC TCC CTT CCT CCC CGC TGA ACAT GCC GCG TGT ATG AAG AACGG GTA ACG TCA ATG AGC AAA | 95 °C for 10 min; 45 cycles of 95 °C for 15 sec and 60 °C for 1 min | (2) |

TaqMan® chemistry were used for quantification; underlined = modified from reference

 (1) J.-P. Furet et al., FEMS Microbiol. Ecol. 68, 351 (2009)

 (2) H. G. H. J. Heilig et al., Appl. Environ. Microbiol. 68, 114 (2002)