

**Figure S4.** Principle Coordinates Analysis based on unweighted and weighted UniFrac distances of bacterial 16S rRNA amplicon sequences from human faecal samples showing gut microbiota beta diversity grouped according to (a) *APOE* genotypes, (b) sex or (c) BMI categories. Beta diversity analysis reveals revealed significant separation of microbial communities according to gender and BMI categories, but not *APOE* genotypes. The significant differences between groups were determined by PERMANOVA tests.