

Table legends

Table S1: Analysis of taxonomic abundances at the phyla, class, order and family level.

WT, IL10^{-/-} and TLR5^{-/-} mice were exposed to drinking water containing CMC or P80 (1.0%) for 12 weeks. Microbiota composition was analyzed. Taxonomic abundances were analyzed at different levels (phyla, class, order and family). All the significantly altered groups upon emulsifier exposure are highlighted in bold. *p*-values were calculated using a 2-tailed t-test..

Table S2: OTUs statistically different between water-treated group and emulsifier-treated group.

WT, IL10^{-/-} and TLR5^{-/-} mice were exposed to drinking water containing CMC or P80 (1.0%) for 12 weeks. Microbiota composition was analyzed. Table lists all OTUs found to be statistically different between water-treated group and emulsifier-treated groups. All OTUs that were previously described to have mucolytic properties are highlighted in purple. *p*-values were calculated using a 2-tailed t-test.

Table S3: Prevalence analysis of the OTUs found to be related to Helicobacter genus.

WT, IL10^{-/-} and TLR5^{-/-} mice were exposed to drinking water containing CMC or P80 (1.0%) for 12 weeks. Microbiota composition was analyzed. Prevalence of the OTUs 470487, 2729098, 102480 and 3319464 (Greengenes Prok_MSA IDs), assigned to belong to the Helicobacter genus, were analyzed. *p*-values were calculated using a 2-tailed t-test..