



Suppl. Figure 5. Graphical representation of the phenotype-metabolite mediated effects by the gut microbiota. Arrows indicate the directionality of the association with beta coefficients of the regression analyses. The middle pie-chart represents the proportion of mediated effect, i.e average causal mediation effect divided by the total effect. **A-C** *Lawsonibacter asaccharolyticus* partially mediates the association between coffee intake and the levels of 1,3-dimethylruic acid in faeces. Similar effects are observed in non-IBD controls (blue), participants with UC (green) and CD (purple). **D.** In controls, *Oscillibacter sp* mediates the association between fruit consumption and N-acetylhistamine. **E.** Colonic resections negatively impact adipate levels via the impact in the abundance of *V.parvula*. **F.** Resection of the ileocecal valve is associated with lower abundances of *F.prausnitzii* having an impact on butyrate levels in faeces. Asterisks indicate significant associations (FDR < 0.05, Suppl. Table 14).