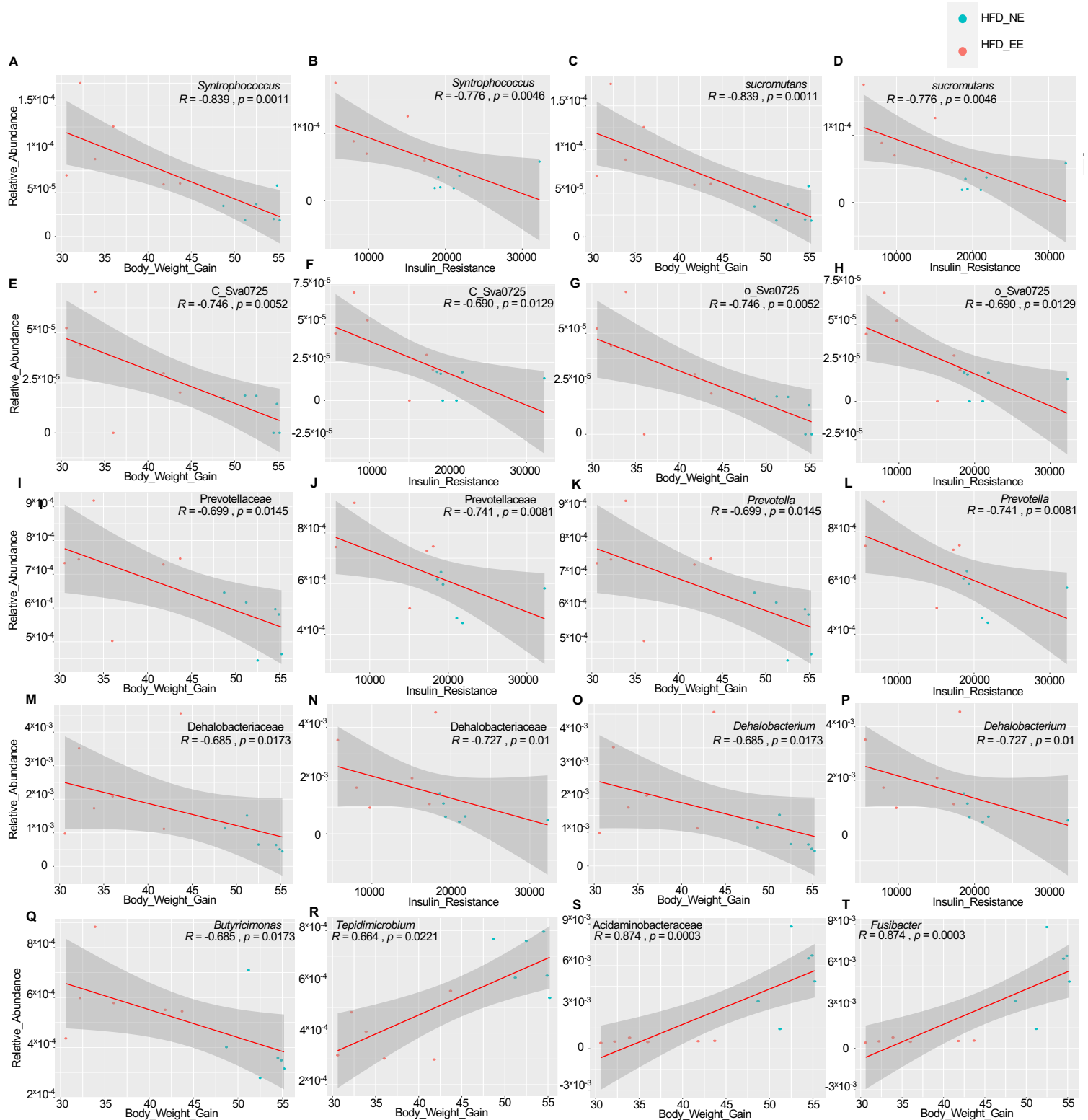




Supplementary figure S5. **Environmental enrichment restores the metabolic imbalance in diet-induced obesity by regulating gut microbiota dysbiosis and increasing specific intestinal taxa.** Positive Spearman correlation coefficient between body weight gain (BWG) and insulin resistance (IR) with several of the taxa enriched in the HFD NE group. Negative Spearman correlation coefficient between BWG and IR with several of the taxa enriched in the HFD EE and HFD NE groups. p_: Phylum; c_: Class; o_: Order; f_: Family; g_: Genus; s_: Specie. A) g_Syntrophococcus in BWG, B) g_Syntrophococcus in IR, C) s_sucrumutants in BWG, D) s_sucrumutants in IR, E) c_Sva0725 in BWG, F) c_Sva0725 in IR, G) o_Sva0725 in BWG, H) o_Sva0725 in IR, I) f_Prevotellaceae in BWG, J) f_Prevotellaceae in IR, K) g_Prevotella in BWG, L) g_Prevotella in IR, M) f_Dehalobacteriaceae in BWG, N) f_Dehalobacteriaceae in IR, O) g_Degalobacterium in BWG, P) g_Degalobacterium in IR, Q) g_Butyricimonas in BWG, R) g_Tepidimicrobium in BWG, S) f_Acidaminobacteraceae in BWG, T) g_Fusibacter in BWG. See Table 1 for the taxonomic ranks of each bacterial. See table 2 for the taxonomic ranks of each bacterial.