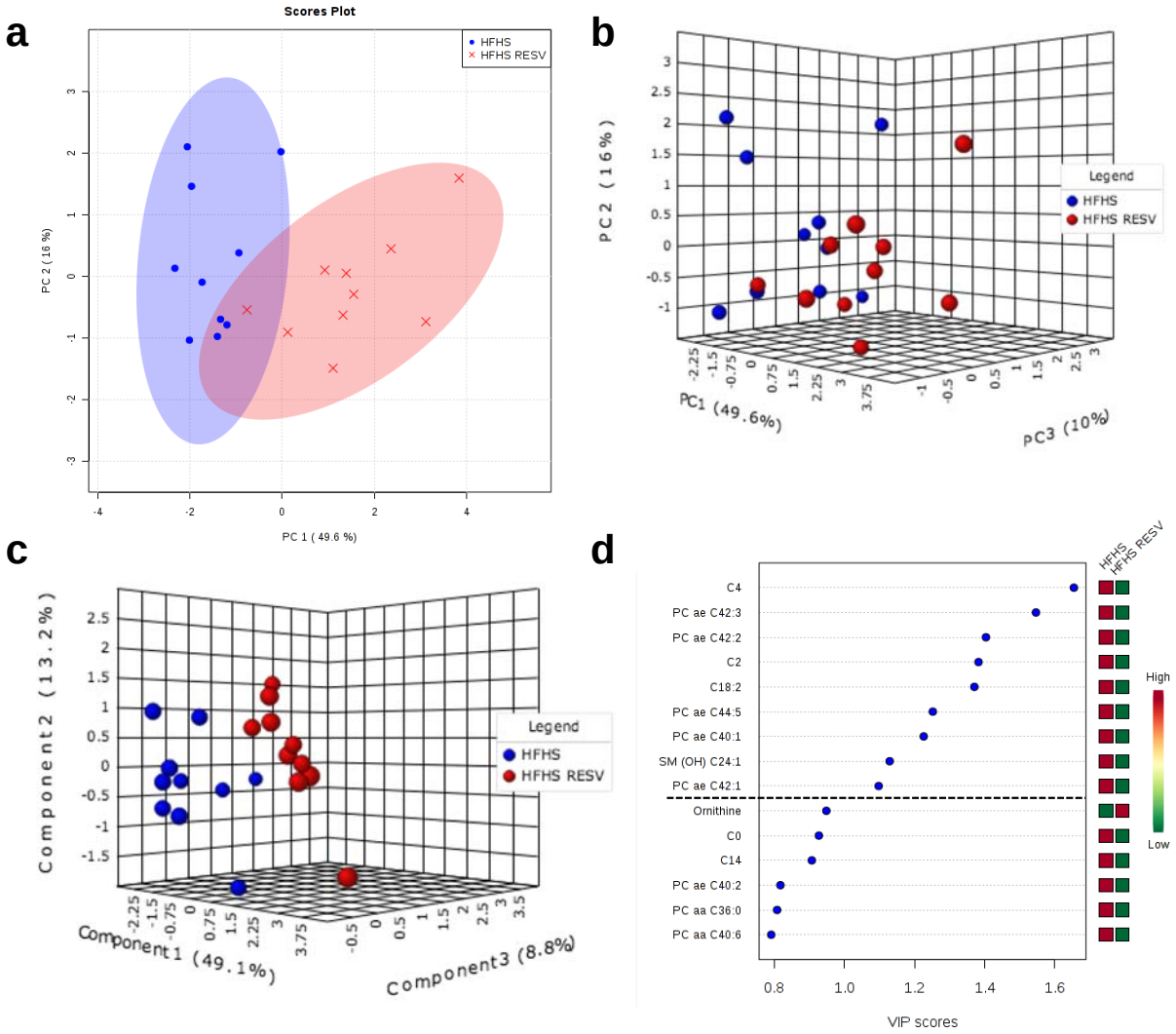
SUPPLEMENTARY DATA

Improved glucose homeostasis in obese mice treated with resveratrol is associated with alterations in the gut microbiome

Miranda M. Sung[1], Ty T. Kim[1], Emmanuel Denou[2], Carrie-Lynn M. Soltys[1], Shereen M. Hamza[1], Nikole J. Byrne[1], Grant Masson[1], Heekuk Park[3], David S. Wishart[4], Karen L. Madsen[3], Jonathan D. Schertzer[2] and Jason R. B. Dyck[1,*]

SUPPLEMENTARY DATA

Supplementary Figure 1. Resveratrol feeding alters serum metabolomic profiles in obese mice. Serum metabolic profiles of mice fed HFHS diet (HFHS) or HFHS supplemented with resveratrol (HFHS+Resv) (n = 10/group) represented by (**a**) 2D and (**b**) 3D principal component analysis (PCA). (**c**) Serum metabolic profiles of HFHS and HFHS+Resv mice (n = 10/group) represented by 3D partial least squares – discriminant analysis (PLS-DA). (**d**) Variable importance in projection (VIP) scores of serum metabolites of HFHS and HFHS+Resv mice (n = 10/group), significant metabolites are listed above the dashed line. Significant subset of metabolites by using univariate analysis for P < 0.1 was used for PCA and PLS-DA. Data normalization consisted of log transformation and Pareto scaling.



SUPPLEMENTARY DATA

Supplementary Figure 2. Fecal microbial transfers from donor mice fed a high-fat high-sugar diet supplemented with resveratrol is sufficient to improve glucose homeostasis in obese mice. (**a**) Glucose tolerance tests of high fat/high sucrose (HFHS)-fed mice at baseline prior to receiving fecal microbial transfers (Pre-FMT; n = 9) from HFHS + resveratrol-fed donor mice (HFHS+Resv Post-FMT; n = 9). (**b**) Glucose clearance represented by the area under the curve of the glucose tolerance tests from HFHS-fed mice prior to FMT (P) and following FMT from HFHS+Resv-fed donor mice (HR).