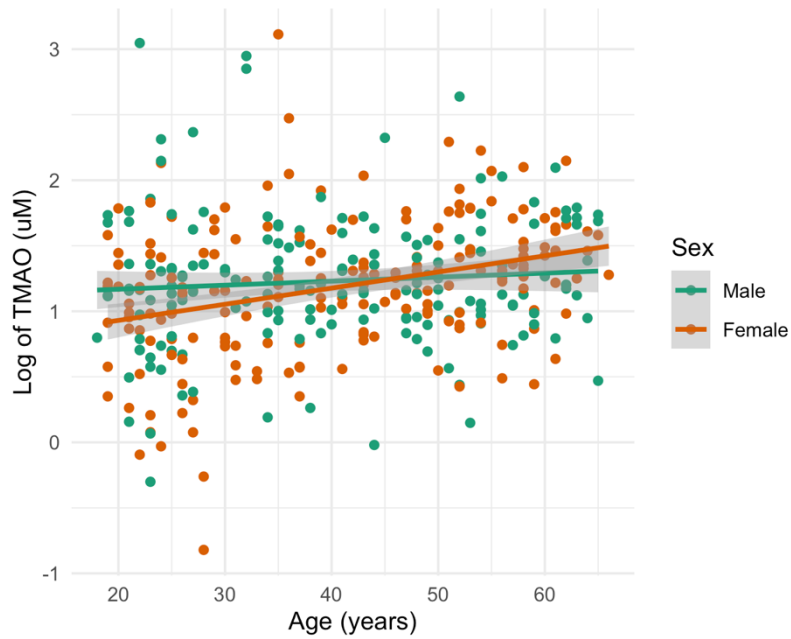
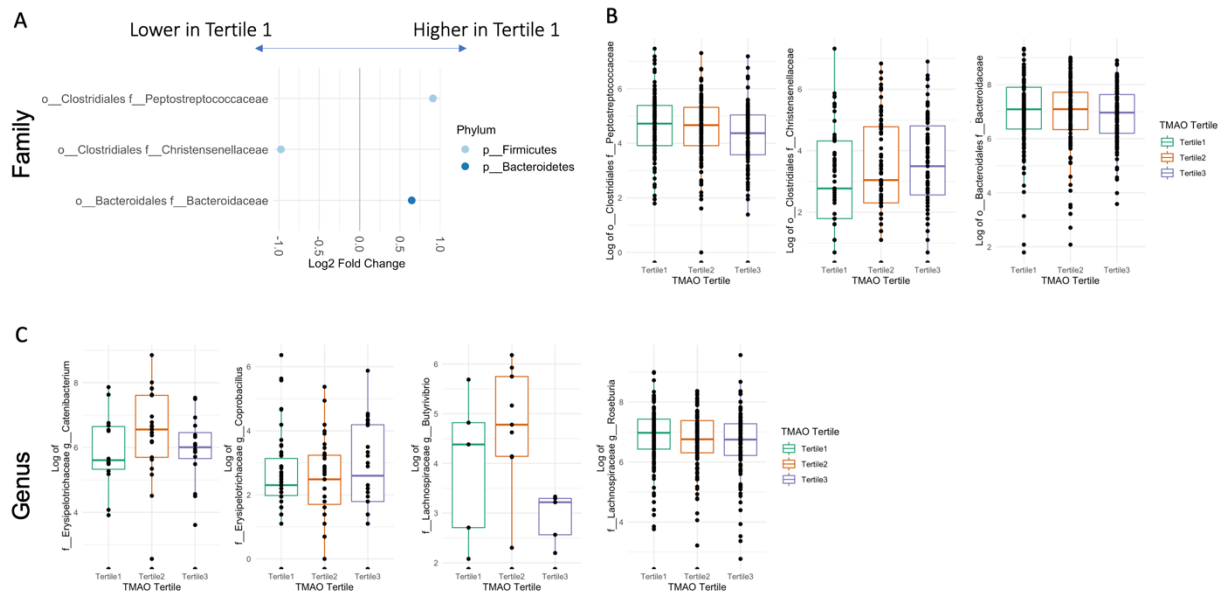


**Supplemental Figure S1.** Flow diagram of participants in the study and analyses.



**Supplemental Figure S2.** A significant sex by age interaction was identified with respect to fasting plasma TMAO concentrations ( $P=0.026$ ).



**Supplemental Figure S3.** (A) Family that are differentially abundant between the low (TMAO 0.44-2.77  $\mu\text{M}$ ) and high TMAO tertile (TMAO 3.91-22.5  $\mu\text{M}$ ). The graph is relative to the low TMAO group such that points to the right of 0 are more abundant in participants with the lowest TMAO values. Distributions of the differentially abundant taxa by TMAO tertile at the (B) family and (C) genus levels.