Supplementary Figures

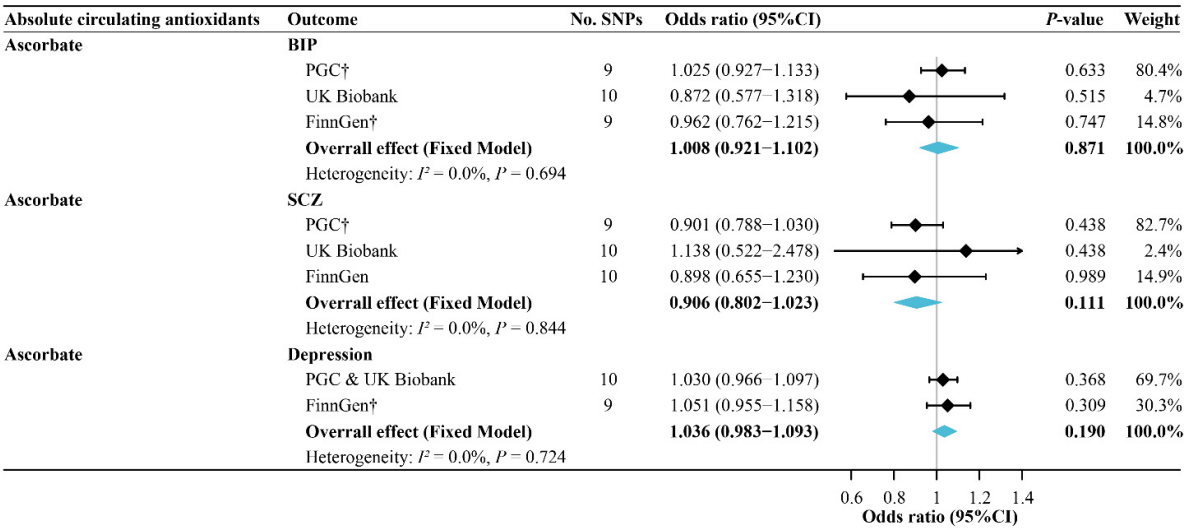


Figure S1. The MR analyses for absolute circulating antioxidant levels on the risk of major mental disorders after removing outliers. The ORs are scaled per μmol/L increase in ascorbate. †: MR analysis results after removing 1 outlier by MR-PRESSO.

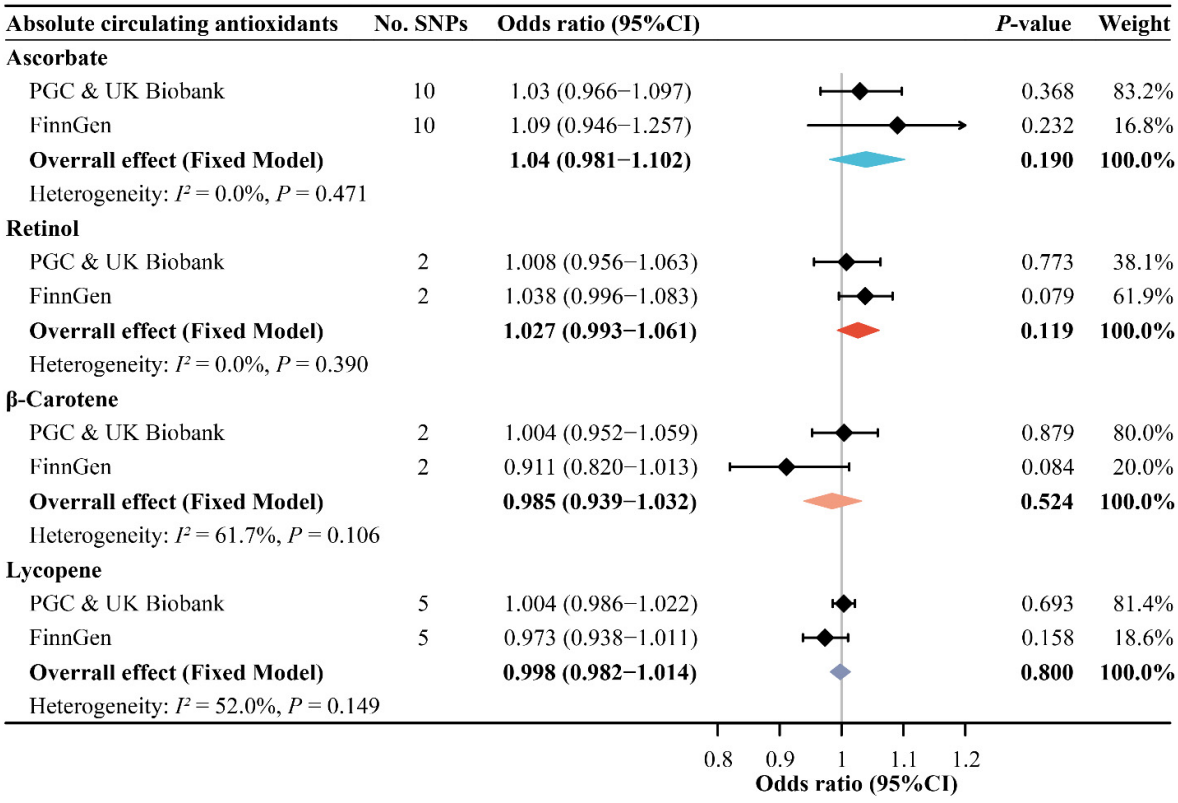


Figure S2. The causal effects of four absolute circulating antioxidant levels on the risk of depression. The ORs are scaled per μmol/L increase in ascorbate, per 0.1 unit increase in ln-transformed retinol, per unit increase in ln-transformed β-carotene, and per μg/dL increase in lycopene.

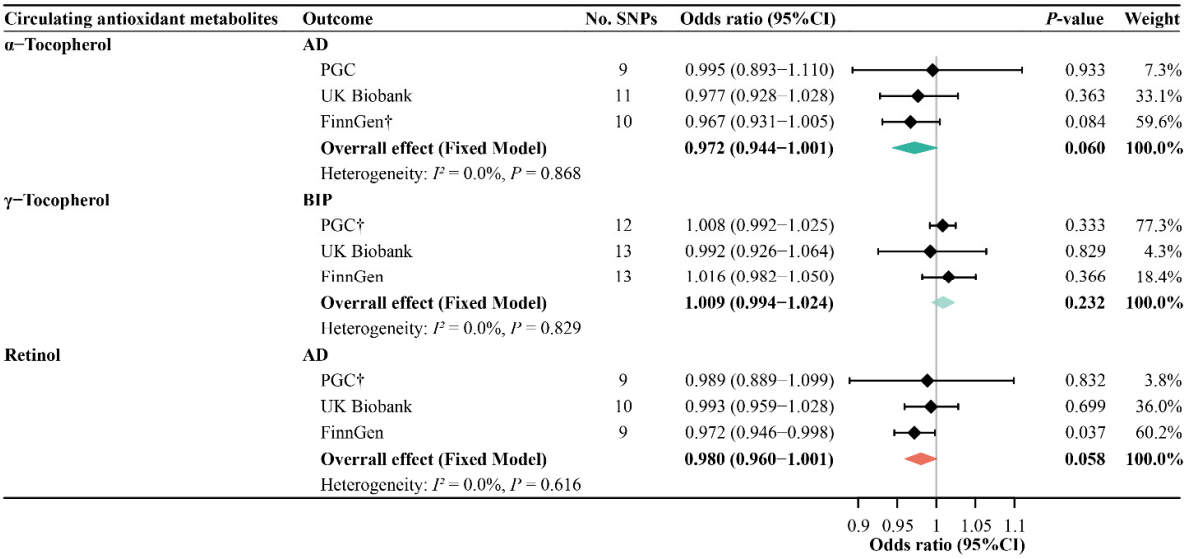


Figure S3. The MR analyses for circulating antioxidant metabolites on the risk of major mental disorders after removing outliers. The ORs are scaled per 0.1 unit increase in log-transformed α-tocopherol and γ-tocopherol, and per unit increase in log-transformed retinol. †: MR analysis results after removing 1 outlier by MR-PRESSO.

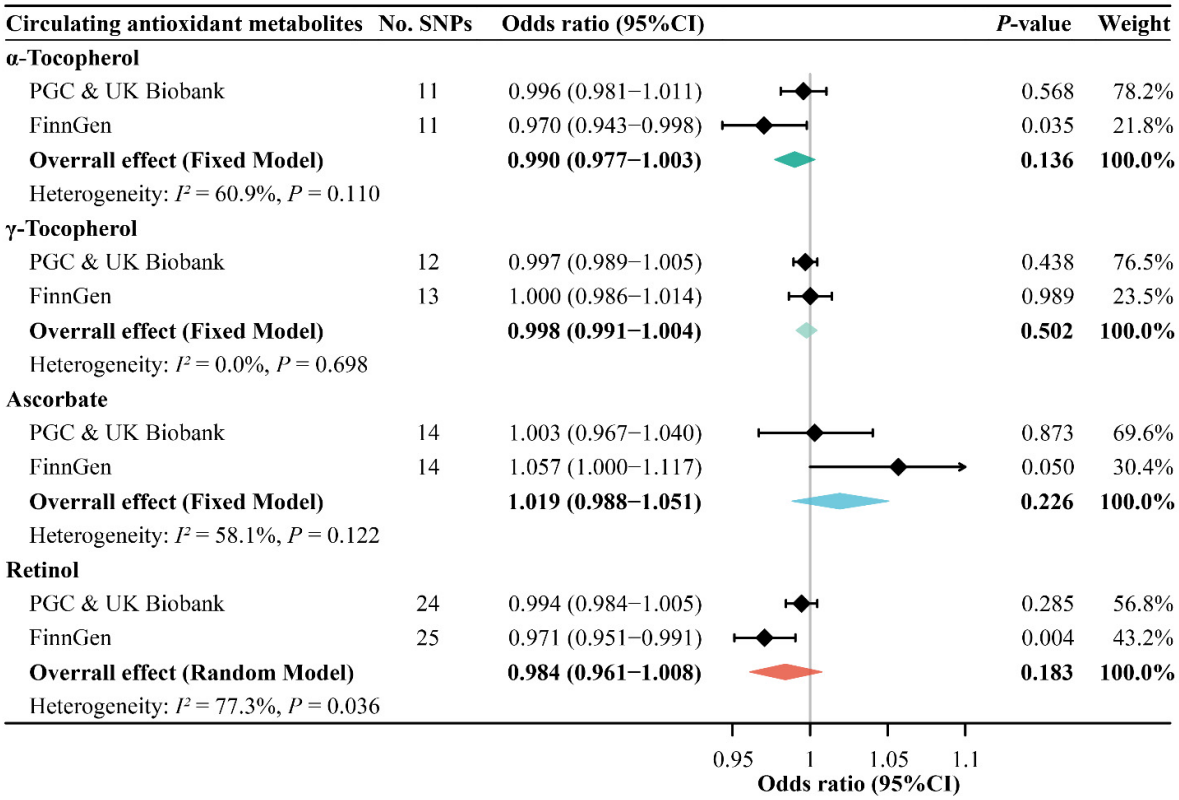


Figure S4. The causal effects of four circulating antioxidant metabolites on the risk of depression. The ORs are scaled per 0.1 unit increase in log-transformed α-tocopherol and γ-tocopherol, and per unit increase in log-transformed ascorbate and retinol