A total of 50,405 participants were recruited from KNHANES VI-V (2007–2012).

19,178 Participants were excluded
12,801 Participants under 20 years of age
3,876 Participants without data on anthropometric of laboratory data
537 Participants without data on CVD events
1,964 Participants with cancer, liver cirrhosis, chronic kidney disease or eGFR <60 mL/min/1.73 m²

31,227 Participants were included in the final analysis

**Supplementary Fig. 1.** Flowchart of final sample selection. KNHANES, Korea National Health and Nutrition Examination Survey; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate.