## Supplementary Material

Supplementary figure 1: Ratio of metabolic health to unhealth among obesity in BMI and WC according to 5 different criteria: (a) BMI; (b) WC

$\mathrm{BMI}=$ body mass index; $\mathrm{WC}=$ waist circumstance; $\mathrm{MHO}=$ metabolically healthy obesity; $\mathrm{MUO}=$ metabolically unhealthy obesity; MHAO = metabolically healthy
abdominal obesity; MUAO = metabolically unhealthy abdominal obesity; ATP $=$ the National Cholesterol Education Program-Adult Treatment Panel III; CDS $=$ Chinese Diabetes Society; HOMA = homeostasis model assessment. The proportion of MHO and MUO in obesity is shown in the figure respectively in total, male and female obesity. The specific rate of each obesity phenotype is listed in the figure in different definitions.

Supplement figure 2: Age-specific prevalence of obesity defined by BMI and WC


Results are expressed as percentage of all subjects within each age category.
$\mathrm{BMI}=$ body mass index; $\mathrm{WC}=$ waist circumstance. Results are expressed as percentage of all subjects within each age category. Participants are divided into 11 groups as following, 35-39 years, 40-44 years, 45-49 years, 50-54 years, 55-59 years, 60-64 years, 65-69 years, 70-74 years, 75-79 years, $80-84$ years, 85 years and above. Age-specific prevalence of each group is acquired with the age- and gender-specific weight-adjusted sample based on the 2010 Beijing municipal population census. The specific prevalence rate of each age group is listed in the table below.

