**Association between cumulative average of dietary total antioxidant capacity and intake of antioxidants with metabolic syndrome risk in Korean adults aged 40 years and older: a prospective cohort study (KoGES\_CAVAS)**

**Supplemental Material 1.1.** Nonlinear dose-response association of dTAC and antioxidants with incident MetS in men: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

**Supplemental Material 1.2.** Nonlinear dose-response association of dTAC and antioxidant classes with incident MetS in women: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

**Supplemental Material 2.1.** Nonlinear dose-response association of total flavonoids and flavonoid subclasses with incident MetS in men: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

**Supplemental Material 2.2.** Nonlinear dose-response association of total flavonoids and flavonoid subclasses with incident MetS in women: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

**Supplemental Material 3.** Baseline characteristics of the study participants (n=11,379)

**Supplemental Material 4.** Incidence rate ratios (IRRs) and 95% confidence intervals (CIs) of MetS by the quartiles of dTAC and antioxidant classes after censoring CVD and cancer (n=11,379)

**Supplemental Material 5.** Incidence rate ratios (IRRs) and 95% confidence intervals (CIs) of MetS by quartiles of dTAC and antioxidant classes among only non-users of antioxidant component supplement (n=8,786)

**Supplemental Material 6.** Incidence rate ratios (IRRs) and 95% confidence intervals (CIs) of MetS by quartiles of dTAC and antioxidant classes of their major food sources (n=11,379)



Supplemental Material 1.1. Nonlinear dose-response association of dTAC and antioxidant classes with incident MetS in men: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

MetS, metabolic syndrome; dTAC, dietary total antioxidant capacity.

Multivariable model was adjusted for age (years), higher education level (≥12 years of schooling), regular exercise (≥3 times/wk and ≥30 min/session), smoking status (current/past/never-smokers for men and current/non-smokers for women), drinking status (yes or no), body mass index (kg/m2), and dietary factors (total energy intake (kcal/day), glycemic index (GI), calcium (mg/day), fiber (g/day), magnesium (mg/day), and sodium (mg/day)) in men and women.



Supplemental Material 1.2. Nonlinear dose-response association of dTAC and antioxidants with incident MetS in women: a restricted cubic spline analysis with three knots (located at the 25th, 50th, and 75th percentiles)

MetS, metabolic syndrome; dTAC, dietary total antioxidant capacity.

Multivariable model was adjusted for age (years), higher education level (≥12 years of schooling), regular exercise (≥3 times/wk and ≥30 min/session), smoking status (current/past/never-smokers for men and current/non-smokers for women), drinking status (yes or no), body mass index (kg/m2), and dietary factors (total energy intake (kcal/day), glycemic index (GI), calcium (mg/day), fiber (g/day), magnesium (mg/day), and sodium (mg/day)) in men and women.