

Table 4 Multiple regression analysis with 4 models of breast cancer risk across quartile (Q) categories of total antioxidant capacity (TAC) intake in total diet and separate food groups

Food group/ model ^a	Q1	Q2	Q3	Q4
Total diet				
TAC (µmolTE/100 g food)	< 1327	1327–1525	1526–1704	> 1704
<i>Breast cancer risk [OR (95% CI)]</i>				
Model 1	1	1.36 (0.68–2.71)	1.32 (0.66–2.62)	0.65 (0.31–1.34)
Model 2	1	1.14 (0.49–2.65)	0.98 (0.41–2.33)	0.57 (0.24–1.36)
Model 3	1	1.16 (0.43–2.57)	1.01 (0.42–2.36)	0.45 (0.18–1.21)
Model 4	1	0.67 (0.12–2.81)	0.59 (0.17–2.15)	0.43 (0.11–1.12)
Fruits				
TAC (µmolTE/100 g fruit)	< 1619	1619–1718	1819–2030	> 2030
<i>Breast cancer risk [OR (95% CI)]</i>				
Model 1	1	0.91 (0.45–1.82)	0.66 (0.31–1.41)	0.29 (0.10–0.84)
Model 2	1	0.92 (0.47–1.81)	0.68 (0.34–1.34)	0.31 (0.14–0.66)**
Model 3	1	0.94 (0.47–1.89)	0.71 (0.36–1.43)	0.28 (0.13–0.62)**
Model 4	1	0.78 (0.34–1.82)	0.48 (0.21–1.11)	0.16 (0.06–0.44)**
Vegetables				
TAC (µmolTE/100 g vegetables)	< 546	546–616	617–682	> 682
<i>Breast cancer risk [OR (95% CI)]</i>				
Model 1	1	1.14 (0.17–3.71)	0.61 (0.13–2.71)	0.37 (0.15–1.23)
Model 2	1	0.86 (0.44–1.70)	0.59 (0.35–1.18)	0.53 (0.34–1.11)
Model 3	1	0.51 (0.12–2.10)	0.54 (0.17–1.72)	0.55 (0.21–1.42)
Model 4	1	0.66 (0.33–1.36)	0.32 (0.15–0.71)	0.29 (0.13–0.68)**
Legumes				
TAC (µmolTE/100 g legumes)	< 386	386–468	469–534	> 534
<i>Breast cancer risk [OR (95% CI)]</i>				
Model 1	1	1.81 (0.88–3.71)	0.96 (0.42–2.19)	0.67 (0.19–2.40)
Model 2	1	1.14 (0.52–2.52)	0.54 (0.22–1.29)	0.39 (0.11–1.46)
Model 3	1	1.12 (0.50–2.49)	0.53 (0.22–1.27)	0.39 (0.10–1.44)
Model 4	1	1.16 (0.52–2.56)	0.56 (0.23–1.34)	0.39 (0.10–1.34)

^aMultivariable logistic regression models were used with adjustment of potential confounders. Model 1: adjusted for age (years); Model 2: additional adjustment for age at menarche (years), age at first pregnancy (years), number of full pregnancies, smoking (yes/no), use of oral contraceptives (yes/no) and use of brassiere per day (< 12 h / > 12 h); Model 3: additional adjustment for body mass index (kg/m²) and life satisfaction (yes/no/partly); Model 4: additional adjustment for menopause status (yes/no), family history of breast cancer (yes/no), physical activity (METs h/week), energy intake (kcal/day), and energy density of the diet (kcal/100 g of foods).

**P < 0.01, using the median of TAC for each quartile as a continuous variable to assess the overall trends of OR across quartile categories of dietary TAC.

OR = odds ratio; CI = confidence interval; n = number of women.