Supporting Information

Figure S1 Forest plot of subgroup analysis by study design for fruit consumption and the risk of PMOP.

Figure S2 Forest plot of subgroup analysis by measurement locations of osteoporosis for fruit consumption and the risk of PMOP.

Figure S3 Forest plot of subgroup analysis by measurement method of osteoporosis for fruit consumption and the risk of PMOP.

Figure S4 Forest plot of subgroup analysis by study design for vegetable consumption and the risk of PMOP.

Figure S5 Forest plot of subgroup analysis by measurement locations of osteoporosis for vegetable consumption and the risk of PMOP.

Figure S6 Forest plot of subgroup analysis by measurement method of osteoporosis for vegetable consumption and the risk of PMOP.

Figure S7 Forest plot of the odds ratio (OR) with corresponding 95% confidence intervals (CIs) of studies on fruit consumption and PMOP (excluding one study that contributed to the between-study heterogeneity). The size of grey box is positively proportional to the weight assigned to each study, and horizontal lines represent the 95% CIs.

Figure S8 Forest plot of the odds ratio (OR) with corresponding 95% confidence intervals (CIs) of studies on vegetable consumption and PMOP (excluding three studies that contributed to the between-study heterogeneity). The size of grey box is positively proportional to the weight assigned to each study, and horizontal lines represent the
95% CIs.

**Figure S9** Influence analysis of 9 studies on fruit consumption and PMOP.

**Figure S10** Influence analysis of 9 studies on vegetable consumption and PMOP.

**Figure S11** Filled funnel plot of the odds ratio of 9 studies on fruit consumption and PMOP. Each dot represents a different study.

**Figure S12** Filled funnel plot of the odds ratio of 9 studies on vegetable consumption and PMOP. Each dot represents a different study.

**Table S1** The search strategy of FV consumption and PMOP in PubMed.

**Table S2** Detailed list of the number of excluded full-text reviewed articles.

**Table S3** Quality assessment of included case-control studies.

**Table S4** Quality assessment of included cross-sectional studies.

**PRISMA checklist**