Supplementary Fig.1 Meta-regression for vitamin K intake and effect size (vitamin K combined with vitamin D on total BMD). BMD, bone mineral density. SMD, standard mean difference.

Supplementary Fig.2 Meta-regression for vitamin D intake and effect size (vitamin K combined with vitamin D on total BMD). BMD, bone mineral density. SMD, standard mean difference.
Supplementary Fig.3 Meta-regression for vitamin K intake and effect size (vitamin K combined with vitamin D on the third lumbar BMD). BMD, bone mineral density. SMD, standard mean difference.

Supplementary Fig.4 Meta-regression for vitamin K intake and effect size (vitamin K combined with vitamin D on UcOC). BMD, bone mineral density. SMD, standard mean difference.
Supplementary Fig. 5 Sensitivity analysis of vitamin K combined with vitamin D on total BMD. BMD, bone mineral density. UcOC, undercarboxylated osteocalcin. SMD, standard mean difference.

Supplementary Fig. 6 Sensitivity analysis of vitamin K combined with vitamin D on neck BMD. BMD, bone mineral density. UcOC, undercarboxylated osteocalcin. SMD, standard mean difference.
Supplementary Fig. 7 Sensitivity analysis of vitamin K combined with vitamin D on second lumbar BMD. BMD, bone mineral density. UcOC, undercarboxylated osteocalcin. SMD, standard mean difference.

Supplementary Fig. 8 Sensitivity analysis of vitamin K combined with vitamin D on third lumbar BMD. BMD, bone mineral density. UcOC, undercarboxylated osteocalcin. SMD, standard mean difference.
Supplementary Fig. 9 Sensitivity analysis of vitamin K combined with vitamin D on forth lumbar BMD. BMD, bone mineral density. UcOC, undercarboxylated osteocalcin. SMD, standard mean difference.