

**Supplemental Fig. S5.** Heritability according to response variables for vitamin D deficiency according to logistic cut-off values (<10 and <20 ng/mL) and vitamin D concentration by continuity. The liability scale was calculated according to the prevalence of vitamin D deficiency in Korea, where prevalence was 8% (<10 ng/mL) and 60% (<20 ng/mL), which showed single nucleotide polymorphism (SNP)-based heritability estimates ( $h^2_{\text{SNP}}$ ) of 5.37% and 8.59%, respectively. The analysis of the vitamin D concentration by continuity for heritability revealed that  $h^2_{\text{SNP}}$  was 7.23% with marginal significance (P=0.0611). SE, standard error.