



**Supplementary Figure S1.** He spatial heterogeneity of ecological factors. (source of the base map: <https://map.baidu.com>). UPP, urban population percentage; GDP-PC, gross domestic product per capita; PTI, the proportion of tertiary industry; ALA-PC, arable land area per capita; FCA-PC, farm corn area per capita; PP, proportion of pupils; AOF, annual output of fruits; AOM, annual output of meat; AOV, annual output of vegetables; NMI, the number of medical institutions; PMT, the percentage of medical technicians; FW, fluoride concentration of water.