S3 Table. Confounders (Population studies).

First author, y (ref)	Confounders Considered	Additional Confounders	Matched	Stratified by	Did considering for additional confounders changed the results?	Adjusted for relevant MS risk factors (latitude at birth[1]; ethnicity[2]; smoking[3,] MS heredity[4]; sun exposure[5,] Epstein-Barr virus[6])
Mirzaei et al. 2011 [28]	Latitude at birth Ancestry Pack-years of cigarette smoking	Smoking during pregnancy Maternal and Paternal Education level Paternal occupation Mothers prepregnancy BMI Daughters' preschool intake of cod liver oil or Multivitamins Mothers' recreational physical activity		Age in months Calendar year	No	1,2,3
Salzer et al. 2012 [23]			Sex Biobank Sampling date Age			
Ueda et al. 2014 [24]		**In early life:** Month of birth Latitude of birth Breastfeeding **In adult life:** 25-hydroxyvitamin D exposure Sun exposure Vitamin D intake from dairy products Fatty fish consumption Smoking Body mass index at 20 years of age **Plus:** Ancestry MS heredity Socioeconomic group	Sex Age Residential area		No	1,2,3,4,5
Cortese et al. 2015 [27]	Age Sex	Smoking before disease onset History of infectious mononucleosis Sun exposure Body shape at age 15 Education Consumption of fatty fish			No	3,5,6
Munger et al. 2016 [25]		Sex of the child Gestational age at sample collection Season of sample collection	Region of Birth Date of maternal sample collection Date of mother's birth Date of child's birth		A 20.03 ng/mL increase in maternal 25(OH)D level was associated with a non-statistically significant 48% reduced risk of MS in the offspring (RR 0.52, 95% CI 0.22-1.19)	1
Nielsen et al. 2017 [26]	Sex Age Date of Birth	Parental ethnicity Birthweight Gestational age			No	2