

Table S1. Hazard ratios (HR) and 95% confident intervals (CI) for incident RA diagnosed at or before age 55 according to time-varying body mass index (BMI) by smoking status (pack years) in Nurses' Health Study and Nurses' Health Study II ^a

BMI (kg/m ²)	Nurses' Health Study			Nurses' Health Study II		
	Packyear 0 - <10	Packyear ≥10	P int ^b	Packyear 0 - <10	Packyear ≥10	P int ^b
18.5-24.9	1.00	1.00		1.00	1.00	
25.0-29.9	1.20(0.88,1.63)	1.24(0.74,2.10)		1.55(1.12,2.14)	2.34(1.36,4.04)	
≥30.0	1.43(0.99,2.06)	1.87(1.01,3.45)	0.550	1.64(1.16,2.32)	2.04(1.15,3.64)	0.486

a. Adjusting for age, community median income, alcohol intake (<5.0, 5.0-<15.0, ≥15 grams/day) and physical activity (0-3, 3-9, 9-18, 18-27, ≥27 METs /week).

b. Overall test p value for BMI by smoking (pack years) interaction