

S4 Table. General characteristics of the overall KORA-S4 participants compared to those analysed in this fundus sub-study.

Shown are participant characteristics for the total study sample (n=4,261), for those subjects without any acquired fundus image (without image, n=1,472), for subjects without grading possible for each eye or with a competing retinal disease (n=243), and for those with gradable fundus image for each eye and no competing retinal disease (analysed subjects, n=2,546). Also shown is a P-value for difference between the analysed subjects and those subjects the un-gradable/with competing retinal disease and between the analysed and those without image computed as linear/logistic regression without and with adjusted for age and sex (where applicable).

	n	All	Without image	With image		P-value for difference			
				Not gradable / competing retinal disease	Analysed	Analysed vs. not gradable / competing retinal disease		Analysed vs. without image	
						Unadj.	Adj.	Unadj.	Adj.
Age [years], mean ± SD	4261	49.18 ± 13.94	50.26 ± 14.00	60.48 ± 11.41	47.48 ± 13.56	9.80*10 ⁻⁴⁶	5.84*10 ⁻⁴⁶	7.56*10 ⁻¹⁰	4.86*10 ⁻¹⁰
Age ≥ 50 years, n (%)	4261	2093 (49.12)	764 (51.90)	204 (83.95)	1125 (44.19)	6.11*10 ⁻²⁶	4.21*10 ⁻²⁶	2.41*10 ⁻⁶	1.69*10 ⁻⁶
Men, n (%)	4261	2090 (49.05)	700 (47.55)	112 (46.09)	1278 (50.20)	0.22	0.11	0.11	0.06
Lifestyle factors									
Current smoker ^a , n (%)	4256	1107 (26.01)	325 (22.09)	46 (18.93)	736 (28.95)	1.02*10 ⁻³	0.74	2.19*10 ⁻⁶	7.76*10 ⁻⁴
Ex-smoker, n (%)	4256	1332 (31.30)	438 (29.78)	91 (37.45)	803 (31.59)	0.06	0.96	8.20*10 ⁻⁴	1.39*10 ⁻³
Never smoker, n (%)	4256	1817 (42.70)	708 (48.13)	106 (43.62)	1003 (39.46)	0.21	0.99	9.05*10 ⁻⁸	4.73*10 ⁻⁶
Pack years ^b , mean ± SD	4174	11.11 ± 18.37	10.45 ± 18.67	14.54 ± 21.71	11.16 ± 17.81	5.79*10 ⁻³	0.30	0.24	0.068
Physically active ^c , n (%)	4242	2064 (48.66)	666 (45.28)	107 (44.03)	1291 (51.07)	0.037	0.55	4.14*10 ⁻⁴	4.36*10 ⁻³
Healthy diet ^d , n (%)	4241	2412 (56.87)	833 (56.63)	167 (69.01)	1412 (55.85)	9.33*10 ⁻⁵	0.26	0.63	0.29
Metabolic parameters									
BMI [kg/m ²] ^e , mean ± SD	4224	27.22 ± 4.73	27.63 ± 4.72	28.44 ± 4.33	26.87 ± 4.73	6.98*10 ⁻⁷	0.34	1.09*10 ⁻⁶	1.28*10 ⁻³
T2DM ^f , n (%)	4255	170 (4.00)	57 (3.88)	24 (9.88)	89 (3.50)	4.33*10 ⁻⁶	0.07	0.54	0.62
Hypertension ^g , n (%)	4243	1286 (30.31)	472 (32.11)	97 (40.08)	717 (28.33)	1.43*10 ⁻⁴	0.76	0.01	0.35
HDL-C [mg/dl]	4214	57.71 ± 17.00	57.96 ± 17.10	57.20 ± 15.21	57.62 ± 17.12	0.71	0.41	0.54	0.95
LDL-C [mg/dl]	4209	137.47 ± 41.53	137.86 ± 39.84	149.86 ± 41.42	136.07 ± 42.29	1.48*10 ⁻⁶	0.65	0.19	0.50

Abbreviations: SD = standard deviation; BMI = body-mass-index; T2DM = type 2 diabetes; HDL-C, LDL-C = high and low density lipoprotein cholesterol; unadj. = unadjusted; adj. = adjusted for age and sex if not indicated otherwise;

a) Current smokers are defined as regular smokers currently smoking ≥ 1 cigarette day, and occasional smokers, currently smoking < 1 cigarette per day.

b) Pack years are defined as number of packs (20 cigarettes per pack) smoked per day times the number of years of smoking.

c) Physically active is defined as ≥ 1 hour of activity per week during leisure time in summer and winter.

d) Healthy diet is defined as a healthy diet score above the median of the analysed sample (median score = 15.00).

e) BMI is defined as measured weight divided by squared measured body height.

f) T2DM is defined as a self-reported diagnosis or anti-diabetes medication intake.

g) Hypertension is defined as actually measured systolic blood pressure of ≥ 140 mmHg, diastolic blood pressure of ≥ 90 mmHg or corresponding medication taken, given that the participants were aware of having hypertension.