

eTable 1. Definitions and scores of cardiovascular health metrics in the Swedish National study on Aging and Care in Kungsholmen

Metrics	Poor (score = 0)	Intermediate (score = 1)	Ideal (score = 2)
Smoking*	Current smoker	Stopped in the last 5 years	Never or stopped >5 year ago
Diet*	Consumption of fruit and vegetables <2 times per day and no high-fiber bread	Consumption of fruit and vegetables ≥2 times per day or high-fiber bread	Consumption of fruit and vegetables ≥2 times per day and high-fiber bread
Physical activity	Never, ≤2-3 times per month in light and/or moderate/intense exercise	Light exercise >1 time per week	Moderate/intense exercise >1 time per week
Body mass index	≥30 kg/m ²	25-29.9 kg/m ²	<25 kg/m ²
Plasma glucose*	HbA1c ≥6.5% or self-reported history, hypoglycemic drug use, or diagnosis in the Swedish National Patient Register	HbA1c 5.7-6.5% and no diabetes	Hb1Ac <5.7 %
Total serum cholesterol	≥6.2 mmol/L	<5.2 treated or 5.2-6.2 mmol/L	<5.2 mmol/L untreated
Blood pressure	SBP ≥140 or DBP ≥90 mmHg	SBP <120 and DBP <80 mmHg treated or, SBP 120-139 or DBP 80-89 mmHg	SBP <120 and DBP <80 mmHg untreated

Abbreviations: HbA1c, glycated hemoglobin; SBP, systolic blood pressure; DBP, diastolic blood pressure.

*The Life's Simple 7 approach defined the intermediate level of smoking as “stopped in the last 12 months” and ideal level as “never or stopped >12 months ago”; defined the metric of diet by the total number of dietary components: 0-1 as poor level, 2-3 as intermediate level, and 4-5 as ideal level; and defined the metric of plasma glucose by plasma glucose level and hypoglycemic drugs: ≥7 mmol/L as poor level, ≥6.7 and <7 mmol/L or treated to goal as intermediate level, and <6.7 mmol/L as ideal level.

Sources: Lloyd-Jones DM, et al. Circulation. 2010. DOI: 10.1161/CIRCULATIONAHA.109.192703; Speh A, et al. J Alzheimers Dis. 2021. DOI: 10.3233/JAD-210280.

eTable 2. Overview of the 15 SNPs related to metabolic risk factors in the Swedish National study on Aging and Care in Kungsholmen MRI sample (n=284)

SNPs	Genotype	Frequency, n (%)	Score	References
Hypertension-related SNPs				
ACE rs1800764	T T	80 (28.17)	0	Chung CM, et al. PLoS One. 2013. DOI: 10.1371/journal.pone.005611 9.
	C T	142 (50.00)	1	
	C C	62 (21.83)	2	
ACE rs4343	A A	58 (20.42)	0	Chung CM, et al. PLoS One. 2013. DOI: 10.1371/journal.pone.005611 9.
	A G	147 (51.76)	1	
	G G	79 (27.82)	2	
Dyslipidemia-related SNPs				
APOE ε4 allele (determined by rs429358 & rs7412)	no ε4	208 (73.24)	0	Bennet AM, et al. JAMA. 2007. DOI: 10.1001/jama.298.11.1300.
	ε3ε4/ε2ε4	68 (23.94)	1	
	ε4ε4	8 (2.82)	2	
LIPC rs1800588	C C	163 (57.39)	0	Fan YM, et al. Clin Genet. 2009. DOI: 10.1111/j.1399-0004.2009. 01180. x; Isaacs A, et al. J Clin Endocrinol Metab. 2004. DOI: 10.1210/jc.2004- 0188.
	C T	100 (35.21)	1	
	T T	21 (7.39)	2	
LDLR rs5930	A A	35 (12.32)	0	de Oliveira, et al. J Mol Neurosci. 2020. DOI: 10.1007/s12031-020-015 88-7; Al-Allaf FA, et al. Hum Genome Var. 2014. DOI: 10.1038/ hgv.2014.21.
	A G	134 (47.18)	1	
	G G	115 (40.49)	2	
ADRB3 rs4994	A A	237 (83.45)	0	Ryuk JA, et al. Diabetes Res Clin Pract. 2017. DOI: 10.1016/j. diabres.2017.03.034;
	A G	45 (15.85)	1	
	G G	2 (0.70)	2	
TOMM40 rs157580	G G	31 (10.92)	0	Sinnott-Armstrong N, et al. Nat Genet. 2021. DOI: 10.1038/s41588 -020- 00757-z.
	A G	135 (47.54)	1	
	A A	118 (41.55)	2	
APOA5 rs2266788	A A	244 (85.92)	0	Park S, et al. J Acad Nutr Diet. 2020. DOI: 10.1016/j.jand.2020. 01.009.
	A G	35 (12.32)	1	
	G G	5 (1.76)	2	
APOB rs693	A A	76 (26.76)	0	Niu C, et al. Lipids Health Dis. 2017. DOI: 10.1186/s12944-017-0558-7.
	A G	137 (48.24)	1	
	G G	71 (25.00)	2	
CETP rs5882	G G	27 (9.51)	0	Hellwege JN, et al. Genet Epidemiol. 2014. DOI: 10.1002/gepi.21801.
	A G	113 (39.79)	1	
	A A	144 (50.70)	2	
Diabetes-related SNPs				
IDE rs1544210	G G	64 (22.54)	0	Zeggini E, et al. Science. 2007. DOI: 10.1126/science.1142364.
	A G	142 (50.00)	1	
	A A	78 (27.46)	2	
LDLC rs4420638	G G	11 (3.87)	0	Sinnott-Armstrong N, et al. Nat Genet. 2021. DOI: 10.1038/s41588 -020- 00757-z.
	A G	82 (28.87)	1	
	A A	191 (67.25)	2	
PPARG rs1801282	G G	12 (4.23)	0	Sinnott-Armstrong N, et al. Nat Genet. 2021. DOI: 10.1038/s41588 -020- 00757-z.
	C G	66 (23.24)	1	
	C C	206 (72.54)	2	
PON1 rs662	T T	151 (53.17)	0	Luo JQ, et al. J Cell Mol Med. 2018. DOI: 10.1111/jcmm.13453.
	C T	112 (39.44)	1	
	C C	21 (7.39)	2	

Abbreviations: SNP, single-nucleotide polymorphism; MRI, magnetic resonance imaging.