

Supplementary Table 1. Descriptives of self-reported diseases and age-related phenotypes investigated in the four study cohorts.

	Middle-aged ¹		Elderly ²		LLI-1 ³		LLI-2 ⁴	
Self-reported Disease	N	No. individuals (%)	N	No. individuals (%)	N	No. individuals (%)	N	No. individuals (%)
Cancer	700		677		1,579		1,265	
No		685 (97.9%)		593 (87.6%)		1,462 (92.6%)		1,131 (89.4%)
Has now or has had		15 (2.1%)		84 (12.4%)		117 (7.4%)		134 (10.6%)
Angina Pectoris	700		676		1,579		1,264	
No		694 (99.1%)		634 (93.8%)		1,410 (89.3%)		1,166 (92.2%)
Has now or has had		6 (0.9%)		42 (6.2%)		169 (10.7%)		98 (7.8%)
Heart Attack	700		677		1,581		1,266	
No		697 (99.6%)		635 (93.8%)		1,470 (93.0%)		1,149 (90.8%)
Has now or has had		3 (0.4%)		42 (6.2%)		111 (7.0%)		117 (9.2%)
Heart Failure	700		676		1,577		1,263	
No		698 (99.7%)		633 (93.6%)		1,390 (88.1%)		1,210 (95.8%)
Has now or has had		2 (0.3%)		43 (6.4%)		187 (11.9%)		53 (4.2%)
Hypertension	700		676		1,567		1,261	
No		612 (87.4%)		493 (72.9%)		1,246 (79.5%)		836 (66.3%)
Has now or has had		88 (12.6%)		183 (27.1%)		321 (20.5%)		425 (33.7%)
Irregular Heart Rhythm	698		677		1,580		1,264	
No		654 (93.7%)		591 (87.3%)		1,265 (80.1%)		975 (77.1%)
Has now or has had		44 (6.3%)		86 (12.7%)		315 (19.9%)		289 (22.9%)
Other Heart Problems	700		675		1,579		1,259	
No		693 (99.0%)		636 (94.2%)		1,452 (92.0%)		1,131 (89.8%)
Has now or has had		7 (1.0%)		39 (5.8%)		127 (8.0%)		128 (10.2%)
Stroke	700		677		1,580		1,270	
No		692 (98.9%)		639 (94.4%)		1,425 (90.2%)		1,118 (88.0%)
Has now or has had		8 (1.1%)		38 (5.6%)		155 (9.8%)		152 (12.0%)
Age-related Phenotype	N	No. individuals (%)	N	No. individuals (%)	N	No. individuals (%)	N	No. individuals (%)
ADL Disability	NA		NA		1,586		1,266	
Not disabled		NA		NA		815 (51.4%)		613 (48.4%)
Moderately disabled		NA		NA		586 (36.9%)		491 (38.8%)
Disabled		NA		NA		185 (11.7%)		162 (12.8%)
ADL Strength	NA		676		1,571		1,254	
< 2		NA		77 (11.4%)		865 (55.1%)		588 (46.9%)
2-<3		NA		130 (19.2%)		583 (37.1%)		419 (33.4%)
≥ 3		NA		469 (69.4%)		123 (7.8%)		247 (19.7%)

Chair Stand Cannot Can, with use of arms Can, without use of arms	NA	NA NA NA	NA	NA NA NA	1,488	103 (6.9%) 572 (38.4%) 813 (54.7%)	1,250	125 (10.0%) 558 (44.6%) 567 (45.4%)
Chair Stand, Timed* 1 st quartile 2 nd quartile 3 rd quartile 4 th quartile	682	171 (25.1%) 170 (24.9%) 171 (25.1%) 170 (24.9%)	421	108 (25.7%) 125 (29.7%) 84 (19.9%) 104 (24.7%)	NA	NA NA NA NA	NA	NA NA NA NA
Depression Symptomatology 1 st quartile 2 nd quartile 3 rd quartile 4 th quartile	700	253 (36.2%) 133 (19.0%) 157 (22.4%) 157 (22.4%)	656	206 (31.4%) 139 (21.2%) 175 (26.7%) 136 (20.7%)	1,492	378 (25.4%) 436 (29.2%) 342 (22.9%) 336 (22.5%)	1,253	324 (25.9%) 314 (25.0%) 343 (27.4%) 272 (21.7%)
Gait Speed Cannot walk Speed ≤ 0.375 m/s Speed > 0.375 m/s	NA	NA NA NA	NA	NA NA NA	1,314	151 (11.5%) 303 (23.1%) 860 (65.4%)	1,041	186 (17.9%) 196 (18.8%) 659 (63.3%)
MMSE Severe impairment (0-17) Mild impairment (18-22) Normal (23-27) Maximum (28-30)	NA	NA NA NA NA	657	26 (4.0%) 68 (10.4%) 290 (44.1%) 273 (41.5%)	1,522	307 (20.2%) 389 (25.5%) 618 (40.6%) 208 (13.7%)	1,246	218 (17.5%) 281 (22.6%) 469 (37.6%) 278 (22.3%)
Self-rated Health Very poor Poor Acceptable Good Excellent	700	4 (0.6%) 27 (3.9%) 84 (12.0%) 271 (38.7%) 314 (44.8%)	661	11 (1.7%) 36 (5.4%) 148 (22.4%) 245 (37.1%) 221 (33.4%)	1,526	26 (1.7%) 128 (8.4%) 499 (32.7%) 615 (40.3%) 258 (16.9%)	1,265	21 (1.7%) 53 (4.2%) 314 (24.8%) 525 (41.5%) 352 (27.8%)
Age-related Phenotype	N	Mean (SE)	N	Mean (SE)	□	Mean (SE)	N	Mean (SE)
Cognitive Composite Score	700	5.61 (0.12)	659	0.98 (0.13)	1,518	0.21 (0.09)	1,244	0.47 (0.10)
Grip Strength*	693	37.80 (0.47)	484	24.31 (0.39)	1,424	16.28 (0.17)	1,091	15.93 (0.20)

¹ Middle-aged refers to individuals from the Study of Middle-Aged Danish Twins (MADT). ² Elderly refers to individuals from the Longitudinal Study of Aging Danish Twins (LSADT). ³LLI-1: Long-lived individuals 1. ⁴LLI-2: Long-lived individuals 2. *In the elderly individuals these phenotypes were collected as part of the 1999 assessment of LSADT instead of the 1997 assessment. NA: Phenotype not available.