

# Supplementary Materials

**Table S1 Questionnaires**

The Chronic Pain Questionnaire	<ol style="list-style-type: none"> <li>1. Do you experience pain in everyday life (if not, stop here)? 0 - no 1 - yes</li> <li>2. Does pain limit your daily life? 0 - no 1 - yes</li> <li>3. Do you take a pain-relieving medication? 0 - no 1 – yes, rarely 2 - yes, often</li> <li>4. Ask the patient to evaluate the severity of pain at the time of filling out the questionnaire on a scale from 1 to 10 (0 - no pain, 10 - unbearable pain): □□ points.</li> </ol>
The Anxiety Disorders Questionnaire	<ol style="list-style-type: none"> <li>1. Are you anxious most of the time? 0 - no 1 - yes</li> <li>2. Are you worrying too much about the little stuff? 0 - no 1 - yes</li> <li>3. Do you think of yourself as an anxious person? 0 - no 1 - yes</li> <li>4. Do you often feel nervous? 0 - no 1 - yes</li> <li>5. Do you often just have enough thoughts to be alarmed? 0 - no 1 - yes</li> </ol> <p>If the total score was 3 or more, the person was considered anxious. If the total score was less than 3, the person was not considered anxious.</p>
The Risk of falls Questionnaire	<ol style="list-style-type: none"> <li>1. Have you fallen over the past year? 0 - no 1 - yes, once 2 - yes, twice and more</li> <li>2. Where did you fall? 0 – I did not 1 - only at home 2 - only in the street 3 – both at home and in the street</li> <li>3. Have you ever had bone fractures as the results of falling from your own height?</li> </ol>

	<p>0 - no 1 - yes</p> <p>4. Have you undergone surgical procedures for the resulting bone fractures? 0 - no 1 - yes</p> <p>5. Did the fracture make you care-dependent? 0 - no 1 - yes, I was taken care of by a nurse 2 - yes, I was taken care of by a family member</p>
The Sensory Deficit Questions	<p>1. Do you have any limitations in your daily life due to loss of vision or hearing? 0 - no 1 - yes</p> <p>2. Do you wear glasses or contact lenses? 0 - no 1 - no, but I should 2 - yes</p> <p>3. Without glasses, your eyesight is: 0 - normal / good 1 - not very good 2 - bad</p> <p>4. When wearing glasses, your eyesight is: 0 - I don't need the glasses 1 - normal / good 2 - not very good 3 - bad</p> <p>5. Is your hearing: 0 - good 1 - slightly reduced 2 - significantly reduced</p> <p>6. Do you use a hearing aid? 0 - no, I do not need one 1 - no, but would like to/should 2 - yes</p>
"Age is not a barrier" screening-test	<p>1. Have you lost 5 kg or more in the past 6 months? Yes/No</p> <p>2. Do you have any limitations in your daily life due to decreased vision or hearing? Yes/No</p> <p>3. Over the past year, have you had a fall-related injury or non-injury falls? Yes/No</p> <p>4. Have you been feeling depressed, sad, or anxious over the past weeks? Yes/No</p> <p>5. Do you have problems with memory, understanding, orientation, or the ability to plan? Yes/No</p> <p>6. Do you suffer from urinary incontinence? Yes/No</p> <p>7. Do you have difficulty moving inside the house or outside (walking up to 100 meters or 1 flight of stairs)? Yes/No</p> <p>The interpretation of the results: For each "Yes" 1 point is awarded. If the total score is:</p>

	<ul style="list-style-type: none"> <li>• 5 and more — senile asthenia is highly probable;</li> <li>• 3—4 points— senile asthenia is moderately probable;</li> <li>• 0—2 points — senile asthenia is unlikely.</li> </ul>
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**Table S2. List of factors**

Long-term factors	<ul style="list-style-type: none"> <li>• father's age when he died (and the reason if younger than 55)</li> <li>• mother's age when she died (and the reason if younger than 65)</li> <li>• family history of cognitive decline (memory loss)</li> </ul>
Medium-term factors	<ul style="list-style-type: none"> <li>• marital status</li> <li>• parental status</li> <li>• total number of children</li> <li>• number of biological children</li> <li>• number of adopted children</li> <li>• education</li> <li>• disability</li> <li>• blood donation</li> <li>• type of menopause</li> <li>• age of menopause onset</li> <li>• number of pregnancies</li> <li>• age of the first childbirth</li> <li>• age of the last childbirth</li> <li>• height</li> <li>• age starting to work</li> <li>• age of retiring</li> <li>• type of job</li> <li>• occupation</li> <li>• income at the peak career</li> <li>• religion</li> <li>• age of taking up smoking</li> <li>• age of quitting smoking</li> <li>• residential area for the last 40 years</li> <li>• previously owning a pet previously (cat or dog)</li> <li>• hobby</li> <li>• life-long physical activity</li> </ul>
Short-term factors	<ul style="list-style-type: none"> <li>• number of family members if living with the family</li> <li>• memory problems</li> <li>• clock-drawing test</li> <li>• frontal lobe disfunction</li> <li>• hippocampus disfunction</li> <li>• weight</li> <li>• BMI</li> <li>• waist circumference</li> </ul>

	<ul style="list-style-type: none"> <li>• systolic pressure</li> <li>• diastolic pressure</li> <li>• heart rate</li> <li>• hypertension</li> <li>• atrial fibrillation</li> <li>• benign tumor</li> <li>• deep vein thrombosis in medical history</li> <li>• pulmonary embolism in medical history</li> <li>• tuberculosis</li> <li>• osteoarthritis</li> <li>• hip replacement</li> <li>• rheumatoid arthritis</li> <li>• osteoporosis</li> <li>• gout</li> <li>• Parkinson's disease</li> <li>• prostate disease</li> <li>• venous ulcer</li> <li>• age-related macular degeneration</li> <li>• gastroesophageal reflux disease</li> <li>• thyroid diseases</li> <li>• mental disorder</li> <li>• skin disorders</li> <li>• restless leg syndrome</li> <li>• essential tremor</li> <li>• sleep apnea</li> <li>• Insomnia Severity Index</li> <li>• aortic stenosis</li> <li>• brachiocephalic artery atherosclerosis</li> <li>• Charlson comorbidity index</li> <li>• self-perceived age</li> <li>• what one finds important/bothering</li> <li>• what one enjoys</li> <li>• what one feels is missing in life</li> <li>• "Age is not a barrier" «Age is not a barrier» screening-test</li> <li>• self-assessment of the quality of life</li> <li>• self-assessment of health</li> <li>• current employment status</li> <li>• receiving guests</li> <li>• going visiting</li> <li>• going out</li> <li>• using the Internet</li> <li>• communicating through phone/Internet</li> <li>• financial circumstances</li> <li>• church attendance</li> <li>• smoking status</li> <li>• cigarette smoke exposure</li> <li>• frequency of alcohol intake</li> <li>• amount of alcohol intake (beverage, quantity, ABV)</li> <li>• six or more alcoholic beverages at one time</li> <li>• physical activity</li> <li>• frequency of walks</li> <li>• duration of walks</li> <li>• physical activity limitation</li> <li>• reasons for physical activity limitation</li> </ul>
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	<ul style="list-style-type: none"> <li>• glaucoma</li> <li>• cataract</li> <li>• vision with glasses</li> <li>• vision without glasses</li> <li>• hearing</li> <li>• urinary incontinence while coughing, laughing, sneezing, picking up weights</li> <li>• urinary incontinence on the way to the bathroom</li> <li>• faecal incontinence</li> <li>• MMSE</li> <li>• SPPB</li> <li>• cancer</li> <li>• CVD in anamnesis</li> <li>• diabetes type 2</li> <li>• chronic heart failure</li> <li>• chronic anemia</li> <li>• chronic obstructive pulmonary disease</li> <li>• Alzheimer's disease</li> <li>• number of aging-associated diseases</li> <li>• sleeping pattern</li> <li>• GDS-5</li> <li>• owning pets</li> <li>• hobby</li> </ul>
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**Table S3.** Associations between GSs and long-term, medium-term and short-term factors.

Factor	GS	Correlation coefficient	p-value	n
Long-term factors (p-value <0.01)				
father's age when he died	Risk of falls	-0.114	$1.95 \times 10^{-05}$	1529
	Frontal lobe dysfunction	-0.082	$2.99 \times 10^{-03}$	1494
Family history of cognitive decline (memory loss)	Incontinence	0.118	$8.21 \times 10^{-07}$	1798
	Sarcopenia	0.082	$6.82 \times 10^{-04}$	1588
	Orthostatic hypotension	0.108	$1.03 \times 10^{-04}$	1238
	Depression	0.192	$6.35 \times 10^{-17}$	1751
	Risk of malnutrition	0.134	$1.04 \times 10^{-07}$	1625
	Cognitive impairment	0.168	$1.28 \times 10^{-12}$	1718
	Frontal lobe dysfunction	0.184	$3.57 \times 10^{-15}$	1739
	Anxiety disorder	0.115	$1.09 \times 10^{-04}$	1280

	Dependence in ADL	0.079	$1.82 \times 10^{-03}$	1754
	Polypragmasia	0.093	$1.14 \times 10^{-04}$	1645
Medium-term factors (p-value $<1.7 \cdot 10^{-3}$ )				
age of retiring	Frontal lobe dysfunction	-0.13	$4.10 \times 10^{-07}$	1680
	Cognitive impairment	-0.141	$2.11 \times 10^{-06}$	1649
age of menopause onset	Frontal lobe dysfunction	-0.309	$5.19 \times 10^{-25}$	1095
	Orthostatic hypotension	-0.177	$6.13 \times 10^{-07}$	791
	Depression	-0.153	$1.07 \times 10^{-06}$	1096
	Dependence in IADL	0.098	$7.73 \times 10^{-04}$	1096
age of the first childbirth	Cognitive impairment	-0.111	$3.70 \times 10^{-04}$	1031
age of quitting smoking	Sensory deficit	0.213	$1.57 \times 10^{-03}$	205
age of starting to work	Frontal lobe dysfunction	-0.292	$3.57 \times 10^{-37}$	1716
	Chronic pain	-0.135	$1.68 \times 10^{-09}$	1763
	Depression	-0.126	$1.15 \times 10^{-08}$	1723
	Cognitive impairment	-0.091	$4.04 \times 10^{-05}$	1688
	Risk of falls	-0.088	$6.03 \times 10^{-05}$	1762
	Anxiety disorder	-0.103	$1.29 \times 10^{-04}$	1235
	Risk of malnutrition	-0.067	$1.70 \times 10^{-03}$	1593
disability	Polypragmasia	0.106	$3.84 \times 10^{-06}$	1768
	Dependence in ADL	0.09	$2.35 \times 10^{-05}$	1896
	Incontinence	0.083	$6.91 \times 10^{-05}$	1935
	Risk of malnutrition	0.085	$1.64 \times 10^{-04}$	1706

	Frailty	0.076	$1.24 \times 10^{-03}$	1940
education	Cognitive impairment	-0.228	$1.85 \times 10^{-20}$	1854
	Frontal lobe dysfunction	-0.164	$2.70 \times 10^{-12}$	1883
	Sarcopenia	-0.085	$1.93 \times 10^{-04}$	1692
	Dependence in IADL	-0.091	$4.11 \times 10^{-04}$	1912
	Polypragmasia	0.074	$1.11 \times 10^{-03}$	1775
previously owning a cat	Chronic pain	0.179	$2.11 \times 10^{-11}$	1446
	Sarcopenia	-0.127	$1.10 \times 10^{-06}$	1307
previously owning a dog	Chronic pain	0.11	$1.80 \times 10^{-05}$	1451
	Sarcopenia	-0.116	$2.01 \times 10^{-05}$	1310
	Risk of falls	0.108	$2.86 \times 10^{-05}$	1459
	Cognitive impairment	-0.095	$4.40 \times 10^{-04}$	1387
hight	Polypragmasia	0.075	$4.24 \times 10^{-04}$	1714
hobby	Cognitive impairment	-0.187	$1.29 \times 10^{-12}$	1333
	Chronic pain	0.178	$1.87 \times 10^{-11}$	1391
	Risk of falls	0.152	$1.62 \times 10^{-08}$	1395
	Sarcopenia	-0.15	$2.70 \times 10^{-08}$	1266
	Risk of malnutrition	-0.125	$8.18 \times 10^{-06}$	1280
income at the peak of career	Cognitive impairment	-0.107	$1.29 \times 10^{-03}$	1397
number of pregnancies	Chronic pain	0.114	$5.00 \times 10^{-05}$	1274
	Sarcopenia	-0.038	$1.08 \times 10^{-03}$	1147
life-long physical activity	Sarcopenia	-0.225	$1.73 \times 10^{-16}$	1259

	Chronic pain	0.199	$6.79 \times 10^{-16}$	1383
	Orthostatic hypotension	0.207	$1.83 \times 10^{-10}$	960
	Risk of falls	0.151	$1.45 \times 10^{-09}$	1387
	Dependence in IADL	-0.16	$1.29 \times 10^{-08}$	1368
	Frontal lobe dysfunction	0.133	$3.91 \times 10^{-07}$	1341
	Dependence in ADL	-0.141	$2.19 \times 10^{-05}$	1351
	Risk of malnutrition	-0.134	$6.83 \times 10^{-05}$	1272
	Sensory deficit	-0.086	$1.67 \times 10^{-03}$	1386
religion	Frontal lobe dysfunction	-0.136	$5.48 \times 10^{-10}$	1848
	Depression	-0.102	$2.13 \times 10^{-07}$	1852
	Orthostatic hypotension	-0.112	$2.03 \times 10^{-04}$	1305
	Risk of malnutrition	-0.044	$1.38 \times 10^{-03}$	1716
residential area	Polypragmasia	0.127	$1.35 \times 10^{-06}$	1422
type of job	Cognitive impairment	-0.176	$6.23 \times 10^{-16}$	1827
	Dependence in IADL	-0.088	$4.76 \times 10^{-05}$	1884
	Sarcopenia	-0.091	$1.44 \times 10^{-04}$	1674
grip strength	Sarcopenia	-0.338	$1.12 \times 10^{-46}$	1661
	Risk of falls	0.082	$5.59 \times 10^{-05}$	1787
	Frontal lobe dysfunction	0.084	$7.05 \times 10^{-05}$	1737
	Chronic pain	0.11	$2.22 \times 10^{-07}$	1787
	Dependence in IADL	-0.085	$1.09 \times 10^{-03}$	1762
	Frailty	-0.111	$5.89 \times 10^{-05}$	1793



Short-term factors (p-value<5.6 · 10 <sup>-4</sup> )				
6 or more alcoholic beverages at one time	IADL	-0.127	3.55 x 10 <sup>-05</sup>	1326
age-related macular degeneration	Frontal lobe dysfunction	-0.129	1.21 x 10 <sup>-08</sup>	1881
Alzheimer's disease	Dementia	0.325	1.16 x 10 <sup>-36</sup>	1489
	Frontal lobe dysfunction	0.229	1.30 x 10 <sup>-18</sup>	1516
	Orthostatic hypotension	0.076	7.57 x 10 <sup>-07</sup>	1128
	Frailty	0.111	8.92 x 10 <sup>-05</sup>	1525
	Depression	0.106	2.01 x 10 <sup>-04</sup>	1507
atrial fibrillation	Polypragmasia	0.195	2.08 x 10 <sup>-17</sup>	1823
benign tumor	Chronic pain	0.08	1.76 x 10 <sup>-05</sup>	1924
BMI	Risk of malnutrition	-0.117	1.41 x 10 <sup>-07</sup>	1765
	Polypragmasia	0.1	2.41 x 10 <sup>-05</sup>	1701
brachiocephalic artery atherosclerosis	Polypragmasia	0.146	5.40 x 10 <sup>-10</sup>	1802
	Depression	0.087	3.43 x 10 <sup>-05</sup>	1895
	Frailty	-0.088	1.82 x 10 <sup>-04</sup>	1964
	Frontal lobe dysfunction	0.078	3.59 x 10 <sup>-04</sup>	1882
cataract	Frontal lobe dysfunction	0.148	8.53 x 10 <sup>-10</sup>	1886
	Chronic pain	0.121	8.75 x 10 <sup>-08</sup>	1909
	Sarcopenia	-0.095	1.57 x 10 <sup>-05</sup>	1682
	Risk of falls	0.096	3.90 x 10 <sup>-05</sup>	1933
	Orthostatic hypotension	0.114	8.21 x 10 <sup>-05</sup>	1302
	Depression	0.085	4.10 x 10 <sup>-04</sup>	1893

Charlson comorbidity index	Dementia	0.275	$7.31 \times 10^{-34}$	1825
	Frontal lobe dysfunction	0.193	$6.11 \times 10^{-17}$	1844
	Depression	0.186	$2.15 \times 10^{-16}$	1847
	Polypragmasia	0.185	$4.22 \times 10^{-15}$	1752
	Frailty	0.116	$1.91 \times 10^{-07}$	1905
	Urinary or faecal incontinence	0.102	$2.31 \times 10^{-06}$	1902
	Risk of malnutrition	0.11	$3.04 \times 10^{-06}$	1700
	Barthel index	0.099	$4.25 \times 10^{-06}$	1863
	Orthostatic hypotension	0.128	$5.07 \times 10^{-06}$	1276
	Anxiety disorder	0.125	$1.32 \times 10^{-05}$	1267
	IADL	0.096	$2.65 \times 10^{-05}$	1867
	Chronic pain	0.091	$4.81 \times 10^{-05}$	1848
chronic heart failure	Frontal lobe dysfunction	-0.185	$5.22 \times 10^{-16}$	1912
	IADL	0.139	$4.58 \times 10^{-10}$	1956
	Polypragmasia	0.145	$5.43 \times 10^{-10}$	1824
	Orthostatic hypotension	-0.141	$4.22 \times 10^{-07}$	1310
	Sarcopenia	0.116	$7.94 \times 10^{-07}$	1708
	Frailty	0.091	$2.13 \times 10^{-05}$	1996
	Risk of malnutrition	0.098	$2.18 \times 10^{-05}$	1757
	Urinary or faecal incontinence	0.084	$1.21 \times 10^{-04}$	1992
	Barthel index	0.082	$1.63 \times 10^{-04}$	1946
church attendance	Frontal lobe dysfunction	-0.126	$4.73 \times 10^{-09}$	1852

	Depression	-0.112	$3.14 \times 10^{-08}$	1857
	Dementia	-0.094	$1.08 \times 10^{-06}$	1823
	Chronic pain	0.098	$2.63 \times 10^{-04}$	1909
clock-drawing test	Dementia	-0.544	$3.85 \times 10^{-108}$	1508
	Frontal lobe dysfunction	-0.314	$7.71 \times 10^{-33}$	1503
	Risk of malnutrition	-0.227	$7.38 \times 10^{-14}$	1366
	Frailty	-0.211	$3.44 \times 10^{-12}$	1528
	Barthel index	-0.185	$4.85 \times 10^{-09}$	1496
	Sarcopenia	-0.167	$1.01 \times 10^{-08}$	1315
	Urinary or faecal incontinence	-0.154	$7.59 \times 10^{-07}$	1525
	IADL	-0.143	$1.33 \times 10^{-06}$	1503
	Depression	-0.132	$6.25 \times 10^{-05}$	1488
	Polypragmasia	0.104	$7.12 \times 10^{-05}$	1417
communication by phone/Internet	Dementia	-0.272	$1.90 \times 10^{-30}$	1875
	IADL	-0.147	$8.14 \times 10^{-10}$	1943
	Frontal lobe dysfunction	-0.131	$1.89 \times 10^{-07}$	1904
	Risk of malnutrition	-0.136	$2.71 \times 10^{-07}$	1746
	Frailty	-0.132	$3.05 \times 10^{-07}$	1975
	Barthel index	-0.117	$4.28 \times 10^{-06}$	1929
	Polypragmasia	0.105	$1.13 \times 10^{-05}$	1798
	Sarcopenia	-0.1	$1.45 \times 10^{-04}$	1698
currently employed	IADL	-0.122	$2.57 \times 10^{-07}$	1946

	Frailty	-0.097	$1.20 \times 10^{-04}$	1983
	Barthel index	-0.097	$4.47 \times 10^{-04}$	1935
CVD in family history	Polypragmasia	0.178	$2.96 \times 10^{-14}$	1823
	Frontal lobe dysfunction	-0.136	$1.43 \times 10^{-08}$	1906
	IADL	0.088	$3.10 \times 10^{-05}$	1952
diabetes type 2	Polypragmasia	0.119	$3.38 \times 10^{-07}$	1821
Frequency of drinking alcoholic beverages	Sarcopenia	-0.14	$1.21 \times 10^{-07}$	1324
	IADL	-0.129	$7.58 \times 10^{-06}$	1439
	Barthel index	-0.137	$9.12 \times 10^{-05}$	1427
essential tremor	Orthostatic hypotension	0.178	$3.02 \times 10^{-10}$	1255
	Depression	0.124	$6.29 \times 10^{-07}$	1792
	Frontal lobe dysfunction	0.098	$9.51 \times 10^{-05}$	1795
faecal incontinence	Urinary or faecal incontinence	0.398	$2.25 \times 10^{-19}$	493
	Dementia	0.333	$3.81 \times 10^{-13}$	459
	Polypragmasia	-0.283	$5.22 \times 10^{-08}$	378
	Depression	-0.195	$1.16 \times 10^{-05}$	490
	Barthel index	0.176	$2.55 \times 10^{-04}$	484
	IADL	0.163	$3.84 \times 10^{-04}$	480
	Frailty	0.174	$4.07 \times 10^{-04}$	494
frequency of walks	Risk of malnutrition	-0.148	$9.42 \times 10^{-10}$	1757
	Dementia	-0.129	$3.93 \times 10^{-08}$	1883
	Frailty	-0.104	$4.90 \times 10^{-06}$	1985

frontal lobe disorder	Frontal lobe dysfunction	0.859	0.00 x 10+00	1803
	Dementia	0.386	1.41 x 10 <sup>-59</sup>	1745
	Depression	0.291	1.90 x 10 <sup>-33</sup>	1760
	Orthostatic hypotension	0.216	2.11 x 10 <sup>-14</sup>	1253
	Frailty	0.154	3.11 x 10 <sup>-09</sup>	1802
	Risk of malnutrition	0.145	4.91 x 10 <sup>-08</sup>	1636
	Anxiety disorder	0.14	1.29 x 10 <sup>-06</sup>	1239
	Chronic pain	0.099	6.30 x 10 <sup>-05</sup>	1795
	Barthel index	0.093	4.49 x 10 <sup>-04</sup>	1760
gastroesophageal reflux disease	Dementia	-0.099	1.31 x 10 <sup>-05</sup>	1873
GDS-5	Depression	0.851	0.00 x 10+00	1840
	Anxiety disorder	0.385	6.15 x 10 <sup>-45</sup>	1309
	Frontal lobe dysfunction	0.306	1.88 x 10 <sup>-37</sup>	1773
	Risk of malnutrition	0.312	6.50 x 10 <sup>-35</sup>	1631
	Dementia	0.224	9.08 x 10 <sup>-19</sup>	1746
	Chronic pain	0.203	2.11 x 10 <sup>-16</sup>	1783
	Barthel index	0.193	2.88 x 10 <sup>-14</sup>	1794
	Orthostatic hypotension	0.183	4.02 x 10 <sup>-11</sup>	1243
	Risk of falls	0.148	6.18 x 10 <sup>-09</sup>	1802
	Urinary or faecal incontinence	0.144	1.30 x 10 <sup>-08</sup>	1832
	Frailty	0.124	4.09 x 10 <sup>-06</sup>	1837
	IADL	0.101	8.62 x 10 <sup>-05</sup>	1802

going out	Risk of malnutrition	-0.333	$1.95 \times 10^{-40}$	1745
	IADL	-0.263	$6.20 \times 10^{-30}$	1935
	Barthel index	-0.251	$3.13 \times 10^{-23}$	1922
	Frailty	-0.226	$4.41 \times 10^{-20}$	1966
	Dementia	-0.223	$1.09 \times 10^{-18}$	1866
	Urinary or faecal incontinence	-0.178	$4.74 \times 10^{-12}$	1965
	Depression	-0.168	$2.00 \times 10^{-11}$	1900
	Sarcopenia	-0.148	$5.22 \times 10^{-10}$	1696
	Frontal lobe dysfunction	-0.119	$2.96 \times 10^{-06}$	1893
receiving guests	Depression	-0.15	$4.75 \times 10^{-11}$	1851
	Frontal lobe dysfunction	-0.138	$1.89 \times 10^{-09}$	1842
self-assessment of health	Depression	-0.393	$5.22 \times 10^{-61}$	1684
	Frontal lobe dysfunction	-0.312	$9.53 \times 10^{-38}$	1675
	Frailty	-0.22	$1.61 \times 10^{-18}$	1711
	Dementia	-0.198	$2.29 \times 10^{-14}$	1637
	Barthel index	-0.194	$4.01 \times 10^{-14}$	1674
	Risk of malnutrition	-0.198	$9.67 \times 10^{-14}$	1571
	Orthostatic hypotension	-0.192	$7.14 \times 10^{-12}$	1238
	Risk of falls	-0.163	$1.22 \times 10^{-10}$	1711
	Chronic pain	-0.16	$1.61 \times 10^{-10}$	1708
	Urinary or faecal incontinence	-0.124	$2.48 \times 10^{-06}$	1709
	IADL	-0.098	$1.68 \times 10^{-04}$	1680

hearing	Sensory deficit	0.423	$4.52 \times 10^{-84}$	1962
	Chronic pain	0.118	$8.01 \times 10^{-08}$	1947
	Barthel index	0.116	$1.06 \times 10^{-07}$	1912
	IADL	0.118	$4.99 \times 10^{-07}$	1922
	Urinary or faecal incontinence	0.101	$2.61 \times 10^{-06}$	1957
	Frailty	0.094	$1.65 \times 10^{-04}$	1959
	Anxiety disorder	0.098	$2.05 \times 10^{-04}$	1324
	Risk of falls	0.083	$3.57 \times 10^{-04}$	1952
hippocampus dysfunction	Dementia	0.373	$1.85 \times 10^{-51}$	1604
	Frontal lobe dysfunction	0.327	$2.43 \times 10^{-40}$	1647
	Orthostatic hypotension	0.104	$2.45 \times 10^{-12}$	1186
	Depression	0.181	$9.13 \times 10^{-12}$	1626
	Frailty	0.13	$2.48 \times 10^{-06}$	1650
	Risk of malnutrition	0.112	$1.00 \times 10^{-04}$	1514
	Barthel index	0.1	$4.23 \times 10^{-04}$	1610
hobby	Dementia	-0.253	$1.27 \times 10^{-20}$	1341
	Risk of malnutrition	-0.199	$6.68 \times 10^{-13}$	1291
	Sarcopenia	-0.189	$1.94 \times 10^{-11}$	1277
	IADL	-0.144	$1.43 \times 10^{-07}$	1386
	Depression	-0.108	$1.00 \times 10^{-04}$	1352
	Frontal lobe dysfunction	-0.101	$3.11 \times 10^{-04}$	1361
	Barthel index	-0.099	$4.51 \times 10^{-04}$	1368

hypertension	Frontal lobe dysfunction	-0.135	$1.90 \times 10^{-09}$	1910
	Polypragmasia	0.083	$4.07 \times 10^{-04}$	1822
	Frailty	0.077	$5.23 \times 10^{-04}$	1994
Insomnia severity index	Depression	0.319	$1.65 \times 10^{-07}$	251
	Sensory deficit	0.239	$9.59 \times 10^{-05}$	246
duration of walks	Risk of malnutrition	-0.325	$8.40 \times 10^{-39}$	1754
	IADL	-0.253	$7.84 \times 10^{-28}$	1942
	Barthel index	-0.248	$7.95 \times 10^{-24}$	1932
	Frailty	-0.223	$4.48 \times 10^{-20}$	1978
	Depression	-0.202	$5.54 \times 10^{-17}$	1907
	Dementia	-0.21	$7.48 \times 10^{-17}$	1877
	Sarcopenia	-0.172	$4.02 \times 10^{-13}$	1706
	Urinary or faecal incontinence	-0.172	$5.88 \times 10^{-12}$	1977
memory problems	Risk of malnutrition	0.14	$1.33 \times 10^{-08}$	1740
memory problems	Urinary or faecal incontinence	0.128	$1.99 \times 10^{-08}$	1955
memory problems	Sensory deficit	0.106	$2.68 \times 10^{-06}$	1946
memory problems	Barthel index	0.1	$2.21 \times 10^{-05}$	1910
memory problems	IADL	0.094	$5.36 \times 10^{-05}$	1922
memory problems	Depression	0.086	$1.47 \times 10^{-04}$	1894
memory problems	Chronic pain	0.086	$2.71 \times 10^{-04}$	1942
MMSE	Dementia	-0.718	$9.99 \times 10^{-294}$	1904
MMSE	Frontal lobe dysfunction	-0.358	$1.12 \times 10^{-54}$	1863



MMSE	Frailty	-0.226	$8.33 \times 10^{-20}$	1902
MMSE	Risk of malnutrition	-0.232	$8.05 \times 10^{-19}$	1689
MMSE	Urinary or faecal incontinence	-0.178	$7.05 \times 10^{-13}$	1899
MMSE	Barthel index	-0.181	$3.53 \times 10^{-12}$	1857
MMSE	Orthostatic hypotension	-0.169	$9.62 \times 10^{-10}$	1280
MMSE	IADL	-0.145	$4.70 \times 10^{-09}$	1871
MMSE	Polypragmasia	0.14	$5.47 \times 10^{-09}$	1733
MMSE	Sarcopenia	-0.145	$2.23 \times 10^{-08}$	1642
MMSE	Depression	-0.127	$2.09 \times 10^{-06}$	1846
MMSE	Chronic pain	0.083	$2.78 \times 10^{-05}$	1851
number of aging-associated diseases	Dementia	0.167	$1.48 \times 10^{-11}$	1465
	Polypragmasia	0.124	$3.77 \times 10^{-06}$	1381
	Risk of malnutrition	0.11	$1.04 \times 10^{-05}$	1390
	Barthel index	0.104	$1.82 \times 10^{-05}$	1472
	Depression	0.098	$6.24 \times 10^{-05}$	1484
osteoarthritis	Frontal lobe dysfunction	-0.202	$5.72 \times 10^{-20}$	1902
osteoarthritis	Sarcopenia	0.125	$1.27 \times 10^{-07}$	1700
osteoarthritis	Urinary or faecal incontinence	0.123	$1.83 \times 10^{-07}$	1981
osteoarthritis	Barthel index	0.124	$2.01 \times 10^{-07}$	1937
osteoarthritis	Polypragmasia	0.121	$2.87 \times 10^{-07}$	1819
osteoarthritis	IADL	0.107	$5.44 \times 10^{-06}$	1946
osteoarthritis	Sensory deficit	0.098	$2.31 \times 10^{-05}$	1932

osteoarthritis	Chronic pain	0.098	$6.80 \times 10^{-05}$	1925
osteoarthritis	Dementia	-0.07	$5.45 \times 10^{-04}$	1873
osteoporosis	Risk of falls	0.183	$1.99 \times 10^{-14}$	1939
osteoporosis	Chronic pain	0.169	$1.96 \times 10^{-12}$	1911
osteoporosis	Depression	0.126	$5.83 \times 10^{-07}$	1899
osteoporosis	Anxiety disorder	0.138	$9.97 \times 10^{-06}$	1311
physical activity	Risk of malnutrition	-0.324	$3.31 \times 10^{-38}$	1752
physical activity	IADL	-0.263	$7.41 \times 10^{-30}$	1943
physical activity	Dementia	-0.267	$2.94 \times 10^{-27}$	1876
physical activity	Frailty	-0.251	$3.75 \times 10^{-25}$	1978
physical activity	Barthel index	-0.256	$4.00 \times 10^{-25}$	1934
physical activity	Depression	-0.225	$1.06 \times 10^{-20}$	1909
physical activity	Urinary or faecal incontinence	-0.206	$4.91 \times 10^{-17}$	1977
physical activity	Sarcopenia	-0.166	$5.60 \times 10^{-12}$	1703
physical activity	Frontal lobe dysfunction	-0.148	$3.26 \times 10^{-09}$	1905
physical activity limitation	Frailty	0.217	$4.98 \times 10^{-20}$	1928
physical activity limitation	Barthel index	0.211	$1.84 \times 10^{-19}$	1884
physical activity limitation	IADL	0.197	$4.64 \times 10^{-17}$	1896
physical activity limitation	Depression	0.173	$1.61 \times 10^{-12}$	1863
physical activity limitation	Sensory deficit	0.159	$7.34 \times 10^{-12}$	1922
physical activity limitation	Urinary or faecal incontinence	0.137	$8.99 \times 10^{-09}$	1927
physical activity limitation	Chronic pain	0.135	$1.48 \times 10^{-08}$	1923

physical activity limitation	Frontal lobe dysfunction	0.139	$1.56 \times 10^{-08}$	1857
physical activity limitation	Risk of malnutrition	0.129	$9.23 \times 10^{-07}$	1723
physical activity limitation	Depression	0.213	$2.72 \times 10^{-05}$	418
physical activity limitation	Frailty	0.208	$6.43 \times 10^{-05}$	421
physical activity limitation	Risk of falls	0.093	$1.77 \times 10^{-04}$	1927
physical activity limitation	Dementia	0.096	$3.39 \times 10^{-04}$	1828
physical activity limitation	IADL	0.178	$5.48 \times 10^{-04}$	412
self-assessment of the quality of life	Depression	-0.288	$2.44 \times 10^{-31}$	1688
self-assessment of the quality of life	Dementia	-0.216	$7.66 \times 10^{-17}$	1641
self-assessment of the quality of life	Risk of malnutrition	-0.197	$8.49 \times 10^{-14}$	1573
self-assessment of the quality of life	Frontal lobe dysfunction	-0.181	$1.48 \times 10^{-12}$	1679
self-assessment of the quality of life	Frailty	-0.177	$5.22 \times 10^{-12}$	1715
self-assessment of the quality of life	Barthel index	-0.152	$5.68 \times 10^{-09}$	1678
self-assessment of the quality of life	Sarcopenia	-0.127	$1.15 \times 10^{-06}$	1565
self-assessment of the quality of life	Orthostatic hypotension	-0.135	$1.97 \times 10^{-06}$	1243
self-assessment of the quality of life	IADL	-0.106	$4.25 \times 10^{-05}$	1684
restless leg syndrome	Chronic pain	0.214	$3.90 \times 10^{-19}$	1768
restless leg syndrome	Anxiety disorder	0.231	$1.45 \times 10^{-16}$	1301
restless leg syndrome	Risk of falls	0.157	$3.83 \times 10^{-11}$	1772
restless leg syndrome	Sarcopenia	-0.136	$1.32 \times 10^{-07}$	1580
restless leg syndrome	Depression	0.106	$8.67 \times 10^{-06}$	1722
restless leg syndrome	Urinary or faecal incontinence	0.095	$1.46 \times 10^{-04}$	1775

rheumatoid arthritis	Polypragmasia	0.083	$3.24 \times 10^{-04}$	1816
«Age is not a barrier” screening-test	Urinary or faecal incontinence	0.445	$1.37 \times 10^{-86}$	1871
“Age is not a barrier” screening-test	Barthel index	0.384	$4.84 \times 10^{-59}$	1833
«Age is not a barrier” screening-test	Depression	0.358	$2.31 \times 10^{-52}$	1842
«Age is not a barrier” screening-test	Risk of falls	0.307	$6.36 \times 10^{-39}$	1867
«Age is not a barrier” screening-test	Risk of malnutrition	0.301	$6.67 \times 10^{-33}$	1704
«Age is not a barrier” screening-test	Frailty	0.261	$4.36 \times 10^{-26}$	1871
«Age is not a barrier” screening-test	IADL	0.242	$4.38 \times 10^{-24}$	1841
«Age is not a barrier” screening-test	Dementia	0.242	$1.26 \times 10^{-21}$	1784
«Age is not a barrier” screening-test	Chronic pain	0.224	$1.01 \times 10^{-20}$	1868
«Age is not a barrier” screening-test	Anxiety disorder	0.264	$1.35 \times 10^{-20}$	1300
«Age is not a barrier” screening-test	Sensory deficit	0.214	$7.48 \times 10^{-20}$	1868
«Age is not a barrier” screening-test	Frontal lobe dysfunction	0.159	$3.13 \times 10^{-10}$	1814
«Age is not a barrier” screening-test	Sarcopenia	0.092	$3.88 \times 10^{-04}$	1656
sleeping pattern	Chronic pain	0.316	$2.93 \times 10^{-27}$	1207
sleeping pattern	Depression	0.316	$5.83 \times 10^{-27}$	1191
sleeping pattern	Anxiety disorder	0.256	$1.83 \times 10^{-16}$	1118
sleeping pattern	Risk of falls	0.223	$2.81 \times 10^{-13}$	1207
sleeping pattern	Urinary or faecal incontinence	0.201	$1.04 \times 10^{-10}$	1206
sleeping pattern	Frontal lobe dysfunction	0.115	$8.43 \times 10^{-10}$	1185
sleeping pattern	Barthel index	0.183	$3.46 \times 10^{-08}$	1189
sleeping pattern	Orthostatic hypotension	0.068	$5.31 \times 10^{-05}$	882

sleeping pattern	Polypragmasia	0.112	$2.65 \times 10^{-04}$	1166
SPPB	Frailty	-0.717	$6.07 \times 10^{-288}$	1889
SPPB	Barthel index	-0.38	$4.57 \times 10^{-57}$	1843
SPPB	Dementia	-0.37	$1.14 \times 10^{-52}$	1795
SPPB	Urinary or faecal incontinence	-0.296	$4.20 \times 10^{-35}$	1886
SPPB	Frontal lobe dysfunction	-0.292	$3.34 \times 10^{-34}$	1813
SPPB	Depression	-0.278	$1.93 \times 10^{-29}$	1826
SPPB	IADL	-0.263	$2.23 \times 10^{-28}$	1855
SPPB	Risk of malnutrition	-0.279	$2.75 \times 10^{-26}$	1665
SPPB	Chronic pain	-0.177	$1.57 \times 10^{-12}$	1838
SPPB	Risk of falls	-0.177	$4.30 \times 10^{-12}$	1862
SPPB	Sarcopenia	-0.166	$7.21 \times 10^{-11}$	1623
SPPB	Orthostatic hypotension	-0.118	$1.19 \times 10^{-05}$	1260
SPPB	Anxiety disorder	-0.118	$1.46 \times 10^{-04}$	1282
thyroid diseases	Polypragmasia	0.151	$7.18 \times 10^{-11}$	1818
thyroid diseases	Dementia	-0.094	$1.02 \times 10^{-05}$	1872
thyroid diseases	Frontal lobe dysfunction	-0.099	$1.03 \times 10^{-05}$	1901
urinary incontinence on the way to the bathroom	Urinary or faecal incontinence	0.859	$1.71 \times 10^{-142}$	491
	Barthel index	0.38	$7.27 \times 10^{-17}$	482
	Frailty	0.205	$4.86 \times 10^{-05}$	492
	Sarcopenia	0.203	$1.71 \times 10^{-04}$	351
	Urinary or faecal incontinence	0.761	$4.54 \times 10^{-92}$	494

urinary incontinence while coughing, laughing, sneezing, taking weights	Barthel index	0.336	$1.37 \times 10^{-12}$	485
	IADL	0.238	$2.90 \times 10^{-07}$	481
	Sarcopenia	0.25	$2.52 \times 10^{-06}$	351
	Frailty	0.247	$4.44 \times 10^{-06}$	495
	Frontal lobe dysfunction	0.2	$1.07 \times 10^{-04}$	467
use of the Internet	IADL	-0.179	$3.02 \times 10^{-14}$	1949
use of the Internet	Barthel index	-0.162	$2.11 \times 10^{-10}$	1935
use of the Internet	Dementia	-0.139	$1.22 \times 10^{-07}$	1881
use of the Internet	Risk of malnutrition	-0.129	$3.94 \times 10^{-06}$	1752
use of the Internet	Frontal lobe dysfunction	-0.108	$1.89 \times 10^{-05}$	1909
use of the Internet	Sarcopenia	-0.097	$7.61 \times 10^{-05}$	1704
use of the Internet	Sensory deficit	-0.092	$1.36 \times 10^{-04}$	1944
vision with glasses	Sensory deficit	0.206	$2.32 \times 10^{-19}$	1950
vision with glasses	Anxiety disorder	0.129	$1.61 \times 10^{-06}$	1320
vision with glasses	Chronic pain	0.095	$2.46 \times 10^{-05}$	1937
vision with glasses	Urinary or faecal incontinence	0.08	$2.07 \times 10^{-04}$	1946
vision with glasses	Depression	0.09	$2.24 \times 10^{-04}$	1878
vision with glasses	Barthel index	0.075	$4.08 \times 10^{-04}$	1901
vision without glasses	Sensory deficit	0.409	$7.15 \times 10^{-78}$	1959
vision without glasses	Barthel index	0.153	$2.73 \times 10^{-11}$	1909
vision without glasses	Risk of malnutrition	0.161	$1.15 \times 10^{-10}$	1744
vision without glasses	Sarcopenia	0.146	$7.18 \times 10^{-09}$	1710

vision without glasses	Urinary or faecal incontinence	0.129	$1.38 \times 10^{-08}$	1954
vision without glasses	IADL	0.132	$3.19 \times 10^{-08}$	1919
vision without glasses	Dementia	0.125	$8.91 \times 10^{-07}$	1853
vision without glasses	Depression	0.117	$3.38 \times 10^{-06}$	1886
going visiting	Frontal lobe dysfunction	-0.427	$4.02 \times 10^{-81}$	1894
going visiting	Depression	-0.291	$3.01 \times 10^{-36}$	1899
going visiting	Dementia	-0.201	$2.41 \times 10^{-16}$	1864
going visiting	Chronic pain	-0.178	$9.62 \times 10^{-15}$	1928
going visiting	Orthostatic hypotension	-0.205	$1.78 \times 10^{-13}$	1308
going visiting	Risk of falls	-0.172	$2.91 \times 10^{-13}$	1946
going visiting	Anxiety disorder	-0.185	$3.00 \times 10^{-11}$	1318
going visiting	IADL	-0.115	$2.23 \times 10^{-06}$	1930
going visiting	Barthel index	-0.113	$1.02 \times 10^{-05}$	1917
going visiting	Risk of malnutrition	-0.108	$3.76 \times 10^{-05}$	1742
going visiting	Frailty	-0.108	$3.78 \times 10^{-05}$	1964
going visiting	Sarcopenia	0.079	$2.51 \times 10^{-04}$	1697
waist circumference	Chronic pain	0.125	$1.41 \times 10^{-08}$	1643
waist circumference	Risk of malnutrition	-0.14	$2.56 \times 10^{-06}$	1538
waist circumference	Sarcopenia	-0.102	$1.16 \times 10^{-04}$	1518
weight	Polypragmasia	0.12	$2.61 \times 10^{-07}$	1713
weight	Risk of malnutrition	-0.135	$1.74 \times 10^{-05}$	1765
weight	Frontal lobe dysfunction	-0.099	$5.48 \times 10^{-04}$	1808

**Table S4.** Association between GSs, AADs, education and type of work.

Education				
	GSs			Presence of AADs
	Sarcopenia	Dependence in IADL	Polypragmasia	
Primary education p-value (OR)	0.01(0.52)	0.48 (0.7)	$3.81 \cdot 10^{-4}(0.51)$	1 (1.14)
Middle school p-value (OR)	0.8 (0.93)	0.67 (1.26)	0.37 (1.16)	0.66 (1.3)
High school p-value (OR)	0.01 (1.85)	0.84 (1.09)	0.03 (1.4)	0.53 (0.74)
Vocational education p-value (OR)	$5.54 \cdot 10^{-4}(0.52)$	$1.13 \cdot 10^{-3}(0.39)$	0.01 (1.42)	1 (1.1)
High school and vocational education p-value (OR)	0.86 (0.94)	0.76 (0.95)	0.19 (1.4)	0.5 (2.58)
Unfinished higher education p-value (OR)	0.2 (0.52)	-*	0.39 (0.64)	0.04 (0.22)
Higher education p-value (OR)	$6.72 \cdot 10^{-4}(0.59)$	$1.68 \cdot 10^{-3}(0.45)$	0.02 (1.3)	$6.5 \cdot 10^{-3}(0.49)$
Doctoral degree p-value (OR)	$7.83 \cdot 10^{-4}(0.32)$	$2.97 \cdot 10^{-5}(0.16)$	0.13 (1.53)	0.02 (0.29)
P-value	$1.83 \cdot 10^{-4}$	$4.11 \cdot 10^{-4}$	$1.11 \cdot 10^{-3}$	$5.9 \cdot 10^{-4}$
Cohort size	1692	1912	1775	1945
Job type				
	GSs			Presence of AADs
	Sarcopenia	Cognitive impairment	Dependence in IADL	
Intellectually demanding and physically intensive job p-value (OR)	0.01 (1.41)	0.04 (0.81)	$1.16 \cdot 10^{-4}(2.52)$	$8.1 \cdot 10^{-3}(2.08)$
Intellectually demanding p-value (OR)	$3.75 \cdot 10^{-5}(0.59)$	$3.72 \cdot 10^{-7}(0.61)$	$1.69 \cdot 10^{-6}(0.39)$	$2.91 \cdot 10^{-7}(0.3)$
physically intensive job p-value (OR)	0.04 (1.39)	$3.76 \cdot 10^{-16}(2.48)$	0.15 (1.44)	$1.16 \cdot 10^{-3}(2.88)$
P-value	$1.44 \cdot 10^{-4}$	$6.23 \cdot 10^{-16}$	$4.76 \cdot 10^{-5}$	$6.86 \cdot 10^{-7}$
Cohort size	1674	1827	1912	1913

Note: \* - No participant had both incomplete college degrees and independence in IADL, therefore a comprehensive analysis was impossible. OR – odds ratio; OR - odds ratio.

**Table S5.** Associations between the presence of aging-associated diseases and risk factors.



Factor	Correlation coefficient	p-value	n
Long-term factors (p-value <0.01)			
Family history of cognitive decline (memory loss)	0.063	$7.53 \times 10^{-03}$	1796
Medium-term factors (p-value < $1.7 \cdot 10^{-3}$ )			
education	-0.077	$5.90 \times 10^{-04}$	1945
type of job	-0.112	$6.86 \times 10^{-07}$	1913
grip strength	-0.137	$7.85 \times 10^{-09}$	1790
disability	0.15	$3.38 \times 10^{-11}$	1936
Short-term factors (p-value < $5.6 \cdot 10^{-4}$ )			
Alzheimer's disease	0.11	$1.87 \times 10^{-05}$	1524
brachiocephalic artery atherosclerosis	0.079	$4.25 \times 10^{-04}$	1961
Charlson comorbidity index	0.205	$1.40 \times 10^{-19}$	1905
chronic heart failure	0.095	$1.87 \times 10^{-05}$	1993
chronic obstructive pulmonary disease	0.084	$1.59 \times 10^{-04}$	1981
clock-drawing test	-0.189	$1.31 \times 10^{-13}$	1527
communication by phone/Internet	-0.119	$1.72 \times 10^{-07}$	1972
CVD in family history	0.314	$1.95 \times 10^{-47}$	1988
diabetes type 2	0.08	$3.69 \times 10^{-04}$	1984
frontal lobe disorder	0.268	$1.83 \times 10^{-30}$	1801
GDS-5	0.093	$7.99 \times 10^{-05}$	1835
going out	-0.099	$1.02 \times 10^{-05}$	1963
hippocampus dysfunction	0.141	$1.64 \times 10^{-08}$	1649

hobby	-0.134	$5.28 \times 10^{-07}$	1401
duration of walks	-0.106	$2.59 \times 10^{-06}$	1975
memory problems	0.082	$2.62 \times 10^{-04}$	1953
MMSE	-0.196	$7.66 \times 10^{-18}$	1901
number of aging-associated diseases	0.346	$1.74 \times 10^{-43}$	1500
physical activity	-0.107	$2.12 \times 10^{-06}$	1975
physical activity limitation	0.1	$1.30 \times 10^{-05}$	1925
self-assessment of the quality of life	-0.12	$9.21 \times 10^{-07}$	1712
“Age is not a barrier” screening-test	0.17	$1.95 \times 10^{-13}$	1868
SPPB	-0.168	$2.00 \times 10^{-13}$	1884
use of the Internet	-0.138	$9.23 \times 10^{-10}$	1979
vision without glasses	0.109	$2.01 \times 10^{-06}$	1953