

X. Physical Function Tests and Physical Activities

1) Physical fitness

Sitting trunk flexion
 Right grip strength
 Left grip strength
 One leg standing with eyes closed
 One leg standing with eyes open (65 years and over)
 Reaction time
 Leg extension power
 Sit up
 Right knee extension strength
 Left knee extension strength
 Maximum step length

2) Gait performance

Step length, pitch and velocity during comfortable walking
 Step length, pitch and velocity during maximum walking

3) Three-dimensional motion of gait during 1 cycle

4) Stabilometry

With eyes open
 With eyes closed

5) Physical activity accessed by electric pedometer

Total energy expenditure
 Exercise energy expenditure
 Steps

6) Physical activity questionnaire*

Leisure-time physical activity
 Job physical activity

*Iwai N, Yoshiike N, Saitoh S, Nose T, Kushiro T, Tanaka H: Leisure-time physical activity and related lifestyle characteristics among middle-aged Japanese. Japan Lifestyle Monitoring Study Group. J Epidemiol 10: 226-33, 2000.

1) Physical fitness (Takei corp.)

Sitting trunk flexion (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.2	8.8	278	2.7	8.7	287	2.1	8.9	268	0.4	9.2	280	-1.1	8.6	68	1.7	8.9	1181
Female	8.6	7.5	291	10.2	7.6	271	10.0	7.6	276	9.7	6.9	264	8.3	9.2	77	9.5	7.6	1179
Total	5.5	8.7	569	6.3	9.0	558	6.1	9.2	544	4.9	9.4	544	3.9	10.1	145	5.6	9.2	2360

Right grip strength (kg)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	44.7	6.4	278	42.3	6.5	289	38.4	5.9	270	33.2	6.5	280	30.1	5.1	70	39.1	7.9	1187
Female	26.9	4.8	295	24.8	4.7	273	23.2	4.2	278	20.8	4.1	272	17.7	4.1	85	23.5	5.2	1203
Total	35.5	10.6	573	33.8	10.4	562	30.6	9.1	548	27.1	8.3	552	23.3	7.7	155	31.3	10.3	2390

Left grip strength (kg)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	42.2	6.5	279	40.9	6.1	289	36.8	6.0	272	32.2	6.3	280	28.6	6.1	70	37.5	7.6	1190
Female	25.6	4.5	294	23.9	4.3	271	22.1	4.0	279	19.4	3.9	273	16.5	4.2	84	22.4	5.0	1201
Total	33.7	10.0	573	32.6	10.0	560	29.4	8.9	551	25.9	8.3	553	22.0	7.9	154	29.9	9.9	2391

One leg standing time with eye closed (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	34.6	38.7	279	25.8	28.6	289	11.0	13.5	271	5.1	4.6	270	3.3	1.8	61	18.5	27.3	1170
Female	31.2	39.8	294	21.5	26.2	274	7.8	8.3	276	3.8	2.9	262	2.6	1.5	63	15.7	26.5	1169
Total	32.9	39.3	573	23.7	27.5	563	9.4	11.2	547	4.5	3.9	532	2.9	1.7	124	17.1	26.9	2339

One leg standing time with eye open (sec) 65 years and older

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	.	.	0	.	.	0	120.1	62.5	129	68.2	60.7	271	34.2	41.4	62	78.1	65.5	462
Female	.	.	0	.	.	0	92.8	66.4	135	49.3	55.5	262	19.4	23.7	65	57.8	60.9	462
Total	.	.	0	.	.	0	106.1	65.9	264	58.9	58.9	533	26.6	34.3	127	67.9	64.0	924

Reaction time (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.393	0.05	279	0.411	0.06	288	0.438	0.07	269	0.473	0.09	268	0.535	0.12	62	0.434	0.08	1166
Female	0.431	0.06	292	0.443	0.07	270	0.462	0.08	272	0.519	0.09	255	0.578	0.14	60	0.468	0.09	1149
Total	0.412	0.06	571	0.426	0.06	558	0.450	0.07	541	0.496	0.10	523	0.556	0.13	122	0.451	0.09	2315

Leg extension power (W)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	676.9	158.4	277	614.2	146.7	278	521.2	121.6	250	400.3	116.0	252	323.3	110.3	56	545.8	177.2	1113
Female	362.4	101.1	282	346.4	108.0	254	314.0	87.9	243	236.4	79.7	213	190.0	69.5	46	313.6	108.4	1038
Total	518.2	205.7	559	486.3	186.3	532	419.1	148.4	493	325.2	129.9	465	263.2	115.0	102	433.8	188.1	2151

Sit up (reps/30sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	18	3.4	271	15	4.2	278	12	4.2	252	9	4.4	246	7	4.1	56	13	5.4	1103
Female	13	4.4	279	9	5.2	250	6	5.3	241	4	4.3	205	4	4.0	43	8	5.9	1018
Total	15	4.7	550	12	5.6	528	9	5.7	493	7	5.0	451	5	4.3	99	11	6.2	2121

Right knee extension strength (kg)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	49.6	9.7	277	47.3	10.6	282	41.2	9.6	261	33.0	8.7	261	28.1	6.8	60	42.2	11.9	1141
Female	30.8	7.8	284	28.6	6.9	262	26.9	7.0	255	22.7	6.4	227	19.6	5.7	53	27.1	7.7	1081
Total	40.1	12.8	561	38.3	13.0	544	34.1	11.0	516	28.2	9.3	488	24.1	7.6	113	34.8	12.6	2222

Left knee extension strength (kg)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	49.2	10.0	278	46.7	11.2	284	40.1	10.0	257	32.2	8.8	262	27.7	6.8	61	41.5	12.2	1142
Female	30.4	7.8	284	28.6	7.3	261	26.9	7.2	257	21.9	6.4	224	17.9	6.7	53	26.7	8.1	1079
Total	39.7	13.0	562	38.0	13.1	545	33.5	10.9	514	27.4	9.3	486	23.1	8.3	114	34.3	12.7	2221

Maximum step length (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	127.7	12.0	278	122.6	11.4	287	115.2	11.3	270	105.5	13.4	271	94.3	12.4	64	116.6	15.5	1170
Female	110.3	11.1	293	106.9	11.3	272	101.1	10.3	274	89.9	11.1	258	81.0	10.5	63	101.2	14.1	1160
Total	118.8	14.5	571	115.0	13.8	559	108.1	12.9	544	97.9	14.6	529	87.7	13.2	127	108.9	16.7	2330

2) Gait performance

Step length of gait with comfortable speed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	75.3	7.5	279	74.0	7.0	289	71.8	7.6	271	68.3	8.7	279	63.1	10.4	68	71.8	8.6	1186
Female	69.7	7.1	294	68.1	6.7	276	67.5	7.3	278	62.4	7.6	269	56.3	8.6	72	66.3	8.2	1189
Total	72.4	7.8	573	71.1	7.5	565	69.6	7.8	549	65.4	8.7	548	59.6	10.1	140	69.1	8.8	2375

Pitch of gait with comfortable speed (step/min)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	117.8	8.4	279	119.9	9.2	289	119.5	10.0	271	116.9	10.0	279	114.9	12.4	68	118.3	9.7	1186

Female	123.4	9.1	294	123.8	10.0	276	124.6	9.6	278	120.8	10.3	269	116.0	11.6	72	122.7	10.1	1189
Total	120.6	9.2	573	121.8	9.8	565	122.1	10.1	549	118.8	10.3	548	115.4	12.0	140	120.5	10.2	2375

Velocity of gait with comfortable speed (m/min)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	88.5	9.6	279	88.5	9.0	289	85.7	10.1	271	79.7	11.3	279	72.3	12.7	68	84.9	11.2	1186
Female	85.9	10.1	294	84.2	10.1	276	83.9	9.4	278	75.2	10.3	269	65.2	11.1	72	81.4	11.6	1189
Total	87.2	10.0	573	86.4	9.8	565	84.8	9.8	549	77.5	11.0	548	68.6	12.4	140	83.1	11.5	2375

Step length of gait with maximum speed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	87.4	8.4	279	86.1	8.0	287	84.0	8.7	268	79.0	9.6	270	73.8	10.2	62	83.6	9.6	1166
Female	77.5	7.3	293	75.7	7.3	273	74.8	7.5	275	68.7	8.6	257	64.4	9.9	58	73.8	8.7	1156
Total	82.3	9.3	572	81.0	9.3	560	79.3	9.3	543	74.0	10.5	527	69.3	11.1	120	78.7	10.4	2322

Pitch of gait with maximum speed (step/min)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	138.5	14.2	279	138.9	12.7	287	136.6	12.5	268	132.4	12.8	270	133.1	13.5	62	136.5	13.3	1166
Female	146.1	12.7	293	144.7	12.2	273	142.4	12.0	275	138.9	13.4	257	133.5	14.6	58	142.7	13.1	1156
Total	142.4	14.0	572	141.7	12.8	560	139.6	12.6	543	135.5	13.5	527	133.3	14.0	120	139.6	13.6	2322

Velocity of gait with maximum speed(m/min)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	120.6	12.9	279	119.3	12.2	288	114.4	12.0	268	104.3	14.2	271	97.8	14.2	62	113.8	14.8	1168
Female	113.0	11.1	294	109.3	11.6	273	106.2	11.1	276	95.1	12.6	257	85.4	11.8	58	105.1	14.0	1158
Total	116.7	12.6	573	114.4	12.9	561	110.2	12.2	544	99.8	14.2	528	91.8	14.5	120	109.5	15.1	2326

3) Three-dimensional motion of gait during 1 cycle

Mean velocity at stance phase during comfortable walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.59	0.16	272	1.59	0.17	285	1.55	0.18	266	1.45	0.20	271	1.32	0.18	64	1.53	0.19	1158
Female	1.56	0.18	289	1.53	0.18	266	1.52	0.17	275	1.37	0.19	262	1.18	0.18	67	1.48	0.21	1159
Total	1.58	0.17	561	1.56	0.18	551	1.54	0.17	541	1.41	0.20	533	1.25	0.20	131	1.51	0.20	2317

Mean velocity at swing phase during comfortable walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.54	0.17	257	1.53	0.17	278	1.50	0.19	263	1.39	0.19	266	1.26	0.18	63	1.48	0.20	1127
Female	1.51	0.18	282	1.47	0.18	257	1.47	0.16	264	1.33	0.19	253	1.14	0.18	64	1.43	0.20	1120
Total	1.52	0.18	539	1.50	0.18	535	1.48	0.18	527	1.36	0.19	519	1.20	0.19	127	1.45	0.20	2247

Mean velocity at 1 cycle during comfortable walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.57	0.16	264	1.56	0.17	283	1.53	0.18	264	1.42	0.20	268	1.29	0.19	64	1.51	0.19	1143
Female	1.54	0.18	283	1.50	0.18	262	1.50	0.16	264	1.35	0.18	259	1.17	0.18	66	1.46	0.20	1134
Total	1.55	0.17	547	1.53	0.18	545	1.52	0.17	528	1.39	0.19	527	1.23	0.19	130	1.48	0.20	2277

Step length during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.78	0.06	270	0.76	0.06	283	0.75	0.07	265	0.72	0.08	271	0.66	0.08	64	0.75	0.08	1153
Female	0.71	0.06	290	0.70	0.06	267	0.69	0.06	274	0.64	0.07	260	0.58	0.07	67	0.68	0.07	1158
Total	0.74	0.07	560	0.73	0.07	550	0.72	0.07	539	0.68	0.08	531	0.62	0.08	131	0.71	0.08	2311

Step frequency during comfortable walking (Hz)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.02	0.14	260	2.06	0.14	277	2.04	0.14	261	1.99	0.14	265	1.96	0.15	62	2.03	0.14	1125
Female	2.16	0.15	279	2.16	0.15	257	2.17	0.13	262	2.10	0.17	253	2.02	0.15	64	2.14	0.15	1115
Total	2.09	0.16	539	2.10	0.15	534	2.11	0.15	523	2.05	0.16	518	1.99	0.15	126	2.08	0.16	2240

Stance time during comfortable walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.66	0.05	270	0.65	0.05	285	0.65	0.05	266	0.67	0.05	268	0.69	0.05	63	0.66	0.05	1152
Female	0.63	0.05	289	0.63	0.05	267	0.62	0.04	273	0.65	0.05	263	0.67	0.05	64	0.63	0.05	1156
Total	0.64	0.05	559	0.64	0.05	552	0.64	0.05	539	0.66	0.05	531	0.68	0.05	127	0.65	0.05	2308

Swing time during comfortable walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.37	0.03	259	0.37	0.02	279	0.37	0.02	260	0.37	0.03	264	0.37	0.03	65	0.37	0.03	1127
Female	0.35	0.02	280	0.35	0.02	259	0.34	0.02	261	0.34	0.02	256	0.34	0.03	64	0.34	0.02	1120
Total	0.36	0.03	539	0.36	0.03	538	0.35	0.03	521	0.35	0.03	520	0.36	0.03	129	0.36	0.03	2247

Double support time at late stance phase during comfortable walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.15	0.02	269	0.15	0.02	280	0.15	0.02	261	0.16	0.02	263	0.16	0.02	62	0.15	0.02	1135
Female	0.15	0.02	286	0.15	0.02	268	0.14	0.02	268	0.15	0.02	254	0.16	0.02	59	0.15	0.02	1135
Total	0.15	0.02	555	0.15	0.02	548	0.15	0.02	529	0.16	0.02	517	0.16	0.02	121	0.15	0.02	2270

Cycle duration during comfortable walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.03	0.06	258	1.02	0.06	275	1.02	0.07	259	1.03	0.07	257	1.05	0.06	60	1.03	0.06	1109
Female	0.97	0.06	276	0.97	0.06	254	0.97	0.06	259	0.99	0.07	251	1.01	0.07	61	0.98	0.06	1101
Total	1.00	0.07	534	1.00	0.06	529	0.99	0.07	518	1.01	0.07	508	1.03	0.07	121	1.00	0.07	2210

Stance time during comfortable walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	64.3	1.6	256	63.8	1.6	274	64.1	1.6	255	64.8	1.7	258	64.9	1.6	61	64.3	1.7	1104
Female	64.5	1.5	277	64.4	1.6	254	64.7	1.4	257	65.6	1.5	249	66.1	1.4	58	64.8	1.6	1095
Total	64.4	1.6	533	64.1	1.6	528	64.4	1.5	512	65.2	1.6	507	65.5	1.6	119	64.6	1.6	2199

Swing time during comfortable walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	35.7	1.6	256	36.2	1.6	273	35.9	1.6	255	35.2	1.7	258	35.0	1.9	62	35.7	1.7	1104
Female	35.5	1.5	277	35.6	1.6	254	35.3	1.5	258	34.4	1.5	248	33.6	2.0	60	35.1	1.7	1097
Total	35.6	1.6	533	35.9	1.6	527	35.6	1.6	513	34.8	1.6	506	34.3	2.1	122	35.4	1.7	2201

Double support time at late stance phase during comfortable walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	14.8	1.4	264	14.8	1.5	277	14.7	1.5	258	15.0	1.5	259	15.1	1.5	61	14.8	1.5	1119
Female	15.0	1.5	283	15.0	1.6	262	14.8	1.4	260	15.6	1.4	248	15.7	1.6	59	15.1	1.5	1112
Total	14.9	1.4	547	14.9	1.5	539	14.8	1.4	518	15.3	1.5	507	15.4	1.6	120	15.0	1.5	2231

Range of motion at hip joint in stance phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	47.4	4.4	256	47.4	4.7	268	47.5	5.6	244	46.6	5.7	250	43.7	6.1	57	47.0	5.2	1075
Female	45.6	4.8	270	46.0	4.6	248	46.7	4.7	259	45.3	5.5	247	41.4	4.7	55	45.7	5.0	1079
Total	46.5	4.7	526	46.7	4.7	516	47.1	5.1	503	45.9	5.7	497	42.6	5.5	112	46.3	5.2	2154

Range of motion at hip joint in swing phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	40.2	4.9	263	40.3	5.2	283	40.3	6.0	258	39.1	6.2	265	36.1	6.3	60	39.8	5.7	1129
Female	38.9	4.9	282	39.1	5.2	262	39.9	5.1	260	38.1	6.2	263	33.7	5.0	63	38.7	5.5	1130
Total	39.5	4.9	545	39.7	5.2	545	40.1	5.6	518	38.6	6.2	528	34.9	5.8	123	39.2	5.6	2259

Range of motion at hip joint in 1 cycle during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	50.2	4.2	247	50.1	4.3	266	50.0	5.4	244	49.0	5.4	245	46.8	5.4	55	49.7	4.9	1057
Female	48.2	4.6	264	48.7	4.4	245	49.3	4.6	249	48.3	5.6	246	44.6	5.1	53	48.4	4.9	1057
Total	49.1	4.5	511	49.4	4.4	511	49.7	5.0	493	48.6	5.5	491	45.7	5.3	108	49.0	5.0	2114

Range of motion at knee joint in stance phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	36.8	5.0	252	36.2	5.2	264	35.9	5.2	239	37.1	5.1	248	36.6	5.5	56	36.5	5.2	1059
Female	37.5	5.4	264	37.5	5.6	237	36.1	5.2	250	36.6	5.4	233	38.7	4.8	53	37.0	5.4	1037
Total	37.2	5.2	516	36.8	5.4	501	36.0	5.2	489	36.9	5.3	481	37.6	5.2	109	36.8	5.3	2096

Range of motion at knee joint in swing phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	63.3	4.2	255	63.5	3.9	279	62.4	4.4	259	62.3	4.6	253	61.1	4.2	63	62.8	4.3	1109
Female	63.5	4.4	278	63.3	4.2	256	62.3	4.6	259	62.5	4.6	253	60.3	5.0	60	62.8	4.6	1106
Total	63.4	4.3	533	63.4	4.1	535	62.3	4.5	518	62.4	4.6	506	60.7	4.6	123	62.8	4.5	2215

Range of motion at knee joint in 1 cycle during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	65.3	4.2	243	65.2	3.6	261	64.1	4.3	242	64.0	4.6	239	62.7	4.1	56	64.6	4.2	1041
Female	65.6	4.1	258	65.2	4.1	237	64.2	4.6	245	64.1	4.4	236	62.0	4.7	49	64.7	4.4	1025
Total	65.5	4.2	501	65.2	3.9	498	64.2	4.5	487	64.0	4.5	475	62.4	4.4	105	64.6	4.3	2066

Range of motion at ankle joint in stance phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	30.6	4.4	250	29.7	4.2	267	29.9	4.3	245	29.0	4.9	244	26.7	4.3	56	29.6	4.5	1062
Female	31.5	4.3	263	31.9	4.4	239	31.2	4.4	249	29.5	4.8	236	29.7	4.8	53	30.9	4.6	1040
Total	31.0	4.4	513	30.8	4.4	506	30.5	4.4	494	29.2	4.9	480	28.2	4.8	109	30.3	4.6	2102

Range of motion at ankle joint in swing phase during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	23.4	5.4	257	21.7	4.9	275	21.6	5.3	255	19.8	6.0	259	17.4	5.2	60	21.4	5.6	1106
Female	24.7	5.0	271	24.3	5.5	252	24.1	5.4	258	21.1	5.3	250	18.5	6.1	66	23.3	5.7	1097
Total	24.1	5.2	528	23.0	5.4	527	22.9	5.5	513	20.4	5.7	509	18.0	5.7	126	22.3	5.7	2203

Range of motion at ankle joint in 1 cycle during comfortable walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	33.7	4.4	240	32.8	4.3	259	32.9	4.5	239	31.4	5.2	244	29.3	4.5	54	32.5	4.7	1036
Female	35.0	4.3	251	35.1	4.6	233	34.0	4.6	240	32.2	5.0	229	32.7	5.3	53	34.0	4.8	1006
Total	34.4	4.4	491	33.9	4.6	492	33.5	4.6	479	31.8	5.1	473	30.9	5.2	107	33.3	4.8	2042

Peak extensor torque at ankle during comfortable walking (Nm)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	99.2	21.3	233	93.4	19.8	238	89.1	18.6	233	81.9	17.5	235	72.4	15.4	56	89.9	20.5	995
Female	75.5	15.3	253	70.0	14.7	233	68.7	14.1	234	61.3	11.5	223	55.1	9.4	54	68.3	15.0	997
Total	86.9	21.9	486	81.9	21.0	471	78.9	19.3	467	71.8	18.1	458	63.9	15.5	110	79.1	20.9	1992

Standard deviation of the residual of lateral trunk excursion at right stride gait cycle during comfortable walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.009	0.002	238	0.010	0.003	257	0.010	0.003	249	0.011	0.004	247	0.011	0.003	60	0.010	0.003	1051
Female	0.007	0.002	263	0.007	0.002	246	0.007	0.002	260	0.008	0.002	250	0.009	0.003	64	0.007	0.002	1083
Total	0.008	0.002	501	0.009	0.003	503	0.009	0.003	509	0.009	0.003	497	0.010	0.004	124	0.009	0.003	2134

Lateral trunk excursion at right stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.036	0.009	238	0.038	0.011	257	0.039	0.011	248	0.042	0.013	244	0.042	0.011	59	0.039	0.011	1046
Female	0.027	0.008	263	0.028	0.009	245	0.028	0.008	257	0.030	0.009	249	0.035	0.013	64	0.029	0.009	1078
Total	0.032	0.010	501	0.033	0.011	502	0.033	0.011	505	0.036	0.013	493	0.038	0.013	123	0.034	0.011	2124

Maximal lateral trunk displacement of right direction at right stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.013	0.003	238	0.014	0.004	257	0.015	0.004	248	0.015	0.005	244	0.016	0.004	59	0.014	0.004	1046
Female	0.010	0.003	263	0.010	0.003	246	0.011	0.003	259	0.011	0.003	250	0.013	0.005	64	0.011	0.003	1082
Total	0.012	0.003	501	0.012	0.004	503	0.013	0.004	507	0.013	0.004	494	0.015	0.005	123	0.013	0.004	2128

Maximal lateral trunk displacement of left direction at right stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.023	0.007	238	-0.024	0.008	257	-0.025	0.008	249	-0.026	0.009	245	-0.027	0.008	59	-0.025	0.008	1048
Female	-0.017	0.005	263	-0.017	0.006	245	-0.017	0.006	258	-0.018	0.007	250	-0.022	0.009	64	-0.018	0.006	1080
Total	-0.020	0.007	501	-0.021	0.008	502	-0.021	0.008	507	-0.022	0.009	495	-0.024	0.009	123	-0.021	0.008	2128

Standard deviation of the residual of lateral trunk excursion at left stride gait cycle during comfortable walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.010	0.003	208	0.010	0.003	196	0.011	0.003	214	0.011	0.003	229	0.012	0.003	53	0.010	0.003	900
Female	0.007	0.002	244	0.007	0.002	225	0.007	0.002	222	0.008	0.003	232	0.010	0.003	64	0.008	0.002	987
Total	0.008	0.003	452	0.009	0.003	421	0.009	0.003	436	0.010	0.003	461	0.011	0.003	117	0.009	0.003	1887

Lateral trunk excursion at left stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.037	0.010	208	0.039	0.011	196	0.041	0.012	214	0.042	0.013	231	0.046	0.014	53	0.041	0.012	902
Female	0.028	0.008	243	0.028	0.009	225	0.028	0.009	221	0.032	0.010	232	0.038	0.012	64	0.030	0.010	985
Total	0.032	0.010	451	0.033	0.011	421	0.034	0.012	435	0.037	0.013	463	0.042	0.014	117	0.035	0.012	1887

Maximal lateral trunk displacement of right direction at left stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.024	0.007	208	0.026	0.007	196	0.026	0.008	214	0.027	0.009	231	0.030	0.009	53	0.026	0.008	902
Female	0.018	0.006	244	0.018	0.006	225	0.018	0.006	223	0.020	0.007	234	0.024	0.008	64	0.019	0.007	990
Total	0.021	0.007	452	0.022	0.008	421	0.022	0.008	437	0.024	0.009	465	0.027	0.009	117	0.022	0.008	1892

Maximal lateral trunk displacement of left direction at left stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.013	0.004	208	-0.014	0.004	196	-0.015	0.004	214	-0.015	0.004	228	-0.016	0.004	52	-0.014	0.004	898
Female	-0.010	0.003	243	-0.010	0.003	225	-0.010	0.003	221	-0.012	0.004	233	-0.013	0.005	64	-0.011	0.004	986
Total	-0.011	0.004	451	-0.012	0.004	421	-0.012	0.004	435	-0.013	0.004	461	-0.015	0.005	116	-0.012	0.004	1884

Forward trunk excursion at right stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.61	0.13	238	1.58	0.13	254	1.55	0.14	249	1.47	0.17	244	1.36	0.17	60	1.54	0.16	1045
Female	1.49	0.13	262	1.46	0.13	241	1.44	0.14	257	1.33	0.15	250	1.19	0.15	64	1.42	0.16	1074
Total	1.55	0.14	500	1.52	0.15	495	1.49	0.15	506	1.40	0.18	494	1.27	0.18	124	1.48	0.17	2119

Forward trunk excursion at left stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.62	0.14	208	1.58	0.14	194	1.55	0.16	213	1.48	0.18	229	1.38	0.17	53	1.54	0.17	897
Female	1.51	0.14	240	1.48	0.16	224	1.45	0.14	222	1.35	0.15	232	1.22	0.19	64	1.43	0.17	982
Total	1.56	0.15	448	1.52	0.16	418	1.50	0.16	435	1.41	0.18	461	1.29	0.19	117	1.48	0.18	1879

Standard deviation of the residual of vertical trunk excursion at right stride gait cycle during comfortable walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.018	0.003	237	0.017	0.003	256	0.017	0.003	248	0.016	0.004	246	0.014	0.003	60	0.017	0.003	1047
Female	0.015	0.003	263	0.014	0.003	246	0.014	0.003	260	0.013	0.003	249	0.011	0.003	64	0.014	0.003	1082
Total	0.016	0.003	500	0.016	0.003	502	0.016	0.004	508	0.015	0.004	495	0.013	0.003	124	0.015	0.004	2129

Vertical trunk excursion at right stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.059	0.010	238	0.057	0.011	257	0.056	0.011	249	0.053	0.012	247	0.048	0.011	60	0.056	0.012	1051
Female	0.050	0.010	263	0.047	0.009	246	0.048	0.011	260	0.044	0.011	250	0.036	0.009	64	0.046	0.011	1083
Total	0.054	0.011	501	0.052	0.011	503	0.052	0.012	509	0.049	0.013	497	0.042	0.012	124	0.051	0.012	2134

Standard deviation of the residual of vertical trunk excursion at left stride gait cycle during comfortable walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.017	0.003	208	0.017	0.003	196	0.016	0.003	213	0.016	0.004	229	0.015	0.003	53	0.016	0.003	899
Female	0.015	0.003	244	0.014	0.003	225	0.014	0.003	223	0.013	0.003	233	0.011	0.002	64	0.014	0.003	989
Total	0.016	0.003	452	0.015	0.003	421	0.015	0.003	436	0.014	0.004	462	0.012	0.004	117	0.015	0.004	1888

Vertical trunk excursion at left stride gait cycle during comfortable walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.057	0.010	208	0.055	0.010	196	0.055	0.011	214	0.052	0.012	231	0.049	0.011	53	0.054	0.011	902
Female	0.050	0.010	244	0.047	0.010	225	0.046	0.010	223	0.044	0.012	234	0.036	0.008	64	0.046	0.011	990
Total	0.053	0.011	452	0.051	0.011	421	0.050	0.012	437	0.048	0.013	465	0.042	0.012	117	0.050	0.012	1892

Mean velocity at stance phase during maximal walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.12	0.20	251	2.09	0.20	265	2.02	0.22	255	1.83	0.23	254	1.72	0.24	61	2.00	0.25	1086
Female	2.01	0.20	283	1.94	0.20	259	1.88	0.21	274	1.68	0.22	241	1.50	0.21	54	1.87	0.25	1111

Total	2.06	0.21	534	2.02	0.22	524	1.95	0.22	529	1.76	0.24	495	1.62	0.25	115	1.93	0.26	2197
-------	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	------

Mean velocity at swing phase during maximal walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.09	0.22	248	2.06	0.23	259	1.97	0.23	246	1.79	0.26	253	1.65	0.24	59	1.96	0.27	1065
Female	1.97	0.21	280	1.90	0.21	252	1.83	0.21	270	1.64	0.23	235	1.46	0.21	52	1.82	0.26	1089
Total	2.02	0.22	528	1.98	0.23	511	1.90	0.23	516	1.72	0.26	488	1.56	0.24	111	1.89	0.27	2154

Mean velocity at 1 cycle during maximal walking (m/s)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.12	0.22	262	2.08	0.22	265	2.00	0.22	251	1.82	0.25	256	1.69	0.23	59	1.99	0.26	1093
Female	1.99	0.20	286	1.93	0.21	257	1.86	0.21	271	1.67	0.23	236	1.49	0.20	52	1.85	0.25	1102
Total	2.05	0.22	548	2.01	0.22	522	1.92	0.23	522	1.75	0.25	492	1.59	0.24	111	1.92	0.27	2195

Step length during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.87	0.06	256	0.85	0.07	267	0.84	0.07	255	0.80	0.08	256	0.75	0.08	61	0.83	0.08	1095
Female	0.77	0.06	289	0.75	0.06	263	0.74	0.07	274	0.69	0.07	245	0.65	0.06	52	0.73	0.07	1123
Total	0.82	0.08	545	0.80	0.08	530	0.79	0.08	529	0.74	0.09	501	0.71	0.09	113	0.78	0.09	2218

Step frequency during maximal walking (Hz)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.41	0.21	246	2.45	0.22	253	2.39	0.23	242	2.29	0.21	244	2.26	0.22	58	2.38	0.23	1043
Female	2.61	0.22	283	2.56	0.22	254	2.51	0.21	265	2.43	0.24	234	2.32	0.20	48	2.52	0.23	1084
Total	2.51	0.24	529	2.50	0.23	507	2.45	0.23	507	2.36	0.23	478	2.29	0.21	106	2.45	0.24	2127

Stance time during maximal walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.54	0.05	254	0.53	0.05	262	0.55	0.05	250	0.58	0.05	250	0.59	0.06	60	0.55	0.06	1076
Female	0.52	0.05	288	0.53	0.04	262	0.54	0.04	273	0.56	0.05	243	0.58	0.05	53	0.54	0.05	1119
Total	0.53	0.05	542	0.53	0.05	524	0.54	0.05	523	0.57	0.05	493	0.58	0.05	113	0.54	0.05	2195

Swing time during maximal walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.33	0.03	243	0.33	0.03	249	0.33	0.03	240	0.34	0.03	248	0.34	0.03	59	0.33	0.03	1039
Female	0.30	0.02	280	0.31	0.03	250	0.31	0.02	263	0.31	0.03	224	0.31	0.03	52	0.31	0.03	1069

Total	0.32	0.03	523	0.32	0.03	499	0.32	0.03	503	0.32	0.03	472	0.32	0.03	111	0.32	0.03	2108
-------	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	------

Double support time at late stance phase during maximal walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.12	0.02	214	0.12	0.02	217	0.12	0.02	223	0.13	0.02	232	0.13	0.02	60	0.12	0.02	946
Female	0.12	0.02	270	0.12	0.02	255	0.12	0.01	262	0.13	0.02	235	0.14	0.02	53	0.12	0.02	1075
Total	0.12	0.02	484	0.12	0.02	472	0.12	0.02	485	0.13	0.02	467	0.13	0.02	113	0.12	0.02	2021

Cycle duration during maximal walking (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.87	0.07	244	0.86	0.07	250	0.88	0.07	239	0.91	0.08	246	0.93	0.08	59	0.89	0.08	1038
Female	0.82	0.06	280	0.84	0.07	251	0.85	0.07	263	0.87	0.08	227	0.89	0.08	52	0.85	0.07	1073
Total	0.85	0.07	524	0.85	0.07	501	0.86	0.07	502	0.89	0.08	473	0.91	0.08	111	0.87	0.08	2111

Stance time during maximal walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	61.7	2.1	243	61.8	2.5	247	62.4	2.4	240	63.3	2.3	243	63.7	1.7	59	62.4	2.4	1032
Female	62.9	2.0	279	62.9	2.2	249	63.4	1.9	263	64.4	2.3	220	65.1	2.5	47	63.4	2.2	1058
Total	62.3	2.2	522	62.3	2.4	496	62.9	2.2	503	63.8	2.3	463	64.3	2.2	106	62.9	2.4	2090

Swing time during maximal walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	38.3	2.1	242	38.2	2.4	246	37.6	2.3	239	36.6	2.0	242	36.3	1.7	59	37.6	2.3	1028
Female	37.1	2.0	278	37.1	2.2	248	36.6	1.6	262	35.6	2.3	219	34.9	2.5	47	36.6	2.2	1054
Total	37.6	2.1	520	37.6	2.4	494	37.1	2.0	501	36.1	2.2	461	35.7	2.2	106	37.1	2.3	2082

Double support time at late stance phase during maximal walking (% of 1 cycle)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.9	1.8	206	13.9	1.6	211	13.9	1.7	217	14.2	1.4	228	14.0	1.4	59	14.0	1.6	921
Female	14.0	1.5	267	14.1	1.5	246	14.1	1.4	256	14.8	1.6	221	15.0	1.5	48	14.3	1.6	1038
Total	14.0	1.6	473	14.0	1.5	457	14.0	1.6	473	14.5	1.6	449	14.5	1.5	107	14.1	1.6	1959

Range of motion at hip joint in stance phase during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	53.2	4.9	239	53.4	5.2	255	53.2	5.9	237	52.3	6.3	232	49.4	6.8	51	52.9	5.7	1014

Female	49.7	5.0	272	49.9	5.4	249	49.9	5.8	258	48.4	6.0	229	44.5	5.8	47	49.3	5.7	1055
Total	51.3	5.2	511	51.7	5.6	504	51.5	6.0	495	50.3	6.4	461	47.1	6.8	98	51.0	6.0	2069

Range of motion at hip joint in swing phase during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	47.6	5.4	255	47.4	5.8	256	46.8	6.7	243	45.0	6.7	247	42.6	7.0	61	46.5	6.4	1062
Female	43.7	5.2	281	44.0	6.0	256	44.1	6.2	267	42.2	7.0	238	37.6	5.8	49	43.3	6.2	1091
Total	45.6	5.7	536	45.7	6.2	512	45.4	6.6	510	43.7	7.0	485	40.4	7.0	110	44.9	6.5	2153

Range of motion at hip joint in 1 cycle during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	55.7	4.8	244	55.6	5.0	247	55.0	5.6	233	54.1	6.0	229	51.8	6.1	51	54.9	5.5	1004
Female	52.5	4.7	265	52.6	5.3	242	52.6	5.4	252	51.5	6.0	226	47.6	5.1	45	52.1	5.4	1030
Total	54.1	5.0	509	54.1	5.3	489	53.8	5.6	485	52.8	6.1	455	49.8	6.0	96	53.5	5.6	2034

Range of motion at knee joint in stance phase during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	31.2	4.7	243	31.2	4.7	262	31.8	5.0	244	33.0	5.5	233	33.1	5.6	53	31.8	5.1	1035
Female	32.9	5.0	266	32.6	5.4	245	31.8	5.6	256	33.5	6.2	217	36.4	5.3	46	32.8	5.6	1030
Total	32.1	4.9	509	31.9	5.1	507	31.8	5.3	500	33.2	5.8	450	34.6	5.7	99	32.3	5.4	2065

Range of motion at knee joint in swing phase during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	61.1	5.3	242	60.7	5.2	251	60.6	5.0	235	61.0	5.0	241	59.8	5.0	59	60.8	5.1	1028
Female	59.9	4.9	273	61.0	4.6	251	60.6	5.0	263	61.2	5.3	236	61.1	5.4	50	60.7	5.0	1073
Total	60.5	5.1	515	60.8	4.9	502	60.6	5.0	498	61.1	5.1	477	60.4	5.2	109	60.7	5.0	2101

Range of motion at knee joint in 1 cycle during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	64.6	4.9	227	64.7	4.8	244	63.7	4.9	227	63.7	4.7	225	62.4	4.9	51	64.1	4.9	974
Female	64.6	4.7	255	64.7	4.3	233	63.6	5.0	248	64.0	5.1	220	62.8	5.3	46	64.2	4.8	1002
Total	64.6	4.8	482	64.7	4.6	477	63.6	4.9	475	63.9	4.9	445	62.6	5.1	97	64.1	4.8	1976

Range of motion at ankle joint in stance phase during maximal walking (deg)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	36.3	6.8	242	34.9	6.3	257	34.7	6.1	242	32.3	6.7	232	30.3	7.3	53	34.4	6.7	1026

Male	0.012	0.003	236	0.012	0.003	241	0.013	0.004	235	0.014	0.004	229	0.014	0.004	52	0.013	0.004	993
Female	0.009	0.003	278	0.009	0.003	240	0.010	0.004	256	0.011	0.004	234	0.011	0.004	48	0.010	0.004	1056
Total	0.010	0.003	514	0.011	0.004	481	0.011	0.004	491	0.012	0.004	463	0.013	0.004	100	0.011	0.004	2049

Maximal lateral trunk displacement of left direction at right stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.016	0.006	236	-0.017	0.006	243	-0.019	0.006	237	-0.021	0.007	227	-0.023	0.007	51	-0.019	0.007	994
Female	-0.013	0.005	278	-0.013	0.005	241	-0.013	0.005	255	-0.015	0.006	236	-0.017	0.007	49	-0.013	0.005	1059
Total	-0.014	0.006	514	-0.015	0.006	484	-0.016	0.006	492	-0.018	0.007	463	-0.020	0.008	100	-0.016	0.007	2053

Standard deviation of the residual of lateral trunk excursion at left stride gait cycle during maximal walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.008	0.002	183	0.008	0.002	179	0.008	0.002	184	0.009	0.002	201	0.009	0.002	43	0.008	0.002	790
Female	0.005	0.002	249	0.006	0.002	227	0.006	0.002	215	0.007	0.002	210	0.008	0.003	47	0.006	0.002	948
Total	0.006	0.002	432	0.007	0.002	406	0.007	0.002	399	0.008	0.003	411	0.008	0.003	90	0.007	0.002	1738

Lateral trunk excursion at left stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.029	0.008	183	0.029	0.009	179	0.032	0.009	184	0.035	0.009	200	0.036	0.010	43	0.032	0.009	789
Female	0.021	0.006	249	0.022	0.007	227	0.023	0.007	215	0.025	0.009	210	0.030	0.012	48	0.023	0.008	949
Total	0.024	0.008	432	0.025	0.009	406	0.027	0.009	399	0.030	0.010	410	0.033	0.011	91	0.027	0.010	1738

Maximal lateral trunk displacement of right direction at left stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.018	0.006	183	0.018	0.007	178	0.020	0.007	182	0.022	0.007	198	0.022	0.007	42	0.020	0.007	783
Female	0.013	0.005	248	0.014	0.005	226	0.014	0.006	215	0.015	0.006	210	0.018	0.007	46	0.014	0.006	945
Total	0.015	0.006	431	0.016	0.006	404	0.017	0.007	397	0.019	0.007	408	0.020	0.007	88	0.017	0.007	1728

Maximal lateral trunk displacement of left direction at left stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.011	0.003	183	-0.011	0.004	179	-0.012	0.003	184	-0.013	0.004	201	-0.013	0.003	42	-0.012	0.004	789
Female	-0.009	0.003	249	-0.009	0.003	227	-0.009	0.003	215	-0.010	0.004	209	-0.011	0.004	48	-0.009	0.003	948
Total	-0.010	0.003	432	-0.010	0.004	406	-0.010	0.004	399	-0.012	0.004	410	-0.012	0.004	90	-0.010	0.004	1737

Forward trunk excursion at right stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
--	---------	--	--	---------	--	--	---------	--	--	---------	--	--	-------	--	--	-------	--	--

	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.80	0.18	234	1.77	0.15	237	1.74	0.15	234	1.64	0.16	227	1.56	0.17	52	1.73	0.17	984
Female	1.62	0.13	276	1.59	0.14	239	1.56	0.15	255	1.45	0.19	232	1.31	0.14	49	1.55	0.17	1051
Total	1.70	0.18	510	1.68	0.17	476	1.64	0.17	489	1.55	0.20	459	1.44	0.20	101	1.64	0.20	2035

Forward trunk excursion at left stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.79	0.23	183	1.78	0.22	174	1.74	0.23	183	1.64	0.20	200	1.56	0.18	43	1.73	0.23	783
Female	1.65	0.17	246	1.61	0.16	225	1.54	0.15	212	1.45	0.17	207	1.33	0.17	48	1.56	0.19	938
Total	1.71	0.21	429	1.68	0.20	399	1.64	0.22	395	1.55	0.21	407	1.44	0.21	91	1.63	0.22	1721

Standard deviation of the residual of vertical trunk excursion at right stride gait cycle during maximal walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.018	0.004	235	0.018	0.005	241	0.018	0.004	235	0.018	0.004	230	0.016	0.004	52	0.018	0.004	993
Female	0.014	0.004	278	0.014	0.003	242	0.014	0.004	256	0.013	0.004	236	0.012	0.003	49	0.014	0.004	1061
Total	0.016	0.005	513	0.016	0.005	483	0.016	0.004	491	0.016	0.005	466	0.014	0.004	101	0.016	0.005	2054

Vertical trunk excursion at right stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.060	0.014	235	0.059	0.015	242	0.060	0.013	234	0.060	0.014	230	0.053	0.013	52	0.060	0.014	993
Female	0.047	0.012	278	0.046	0.012	242	0.047	0.013	256	0.044	0.013	236	0.040	0.010	49	0.046	0.012	1061
Total	0.053	0.015	513	0.052	0.015	484	0.053	0.014	490	0.052	0.016	466	0.047	0.014	101	0.052	0.015	2054

Standard deviation of the residual of vertical trunk excursion at left stride gait cycle during maximal walking

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.018	0.004	183	0.018	0.005	178	0.018	0.004	184	0.018	0.004	203	0.016	0.004	43	0.018	0.004	791
Female	0.014	0.004	249	0.014	0.004	227	0.014	0.004	215	0.013	0.004	210	0.012	0.003	48	0.014	0.004	949
Total	0.016	0.004	432	0.016	0.005	405	0.016	0.005	399	0.015	0.005	413	0.014	0.004	91	0.015	0.005	1740

Vertical trunk excursion at left stride gait cycle during maximal walking (m)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.060	0.014	183	0.058	0.016	177	0.060	0.015	183	0.059	0.015	204	0.052	0.012	43	0.059	0.015	790
Female	0.047	0.013	249	0.046	0.013	226	0.046	0.012	215	0.043	0.012	210	0.040	0.010	48	0.045	0.012	948
Total	0.052	0.014	432	0.052	0.015	403	0.052	0.015	398	0.051	0.016	414	0.046	0.012	91	0.051	0.015	1738

Stabilometry – sway area with eyes open (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.94	1.28	279	3.05	1.24	289	3.27	1.52	274	3.95	1.71	282	4.85	2.53	73	3.40	1.62	1197
Female	2.50	1.25	294	2.86	1.32	277	3.19	1.61	281	3.65	1.79	275	3.87	1.89	80	3.10	1.60	1207
Total	2.71	1.28	573	2.96	1.28	566	3.23	1.57	555	3.80	1.76	557	4.33	2.27	153	3.25	1.62	2404

Stabilometry – total power spectram X with eyes open (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.42	0.32	279	0.40	0.25	289	0.41	0.28	274	0.51	0.32	282	0.68	0.55	73	0.45	0.32	1197
Female	0.33	0.23	294	0.37	0.24	277	0.40	0.31	281	0.50	0.33	275	0.53	0.33	80	0.41	0.29	1207
Total	0.37	0.28	573	0.38	0.25	566	0.41	0.29	555	0.51	0.33	557	0.60	0.45	153	0.43	0.31	2404

Stabilometry – total power spectram Y with eyes open (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.81	0.64	279	0.75	0.52	289	0.73	0.46	274	0.78	0.49	282	0.76	0.44	73	0.77	0.53	1197
Female	0.63	0.46	294	0.70	0.52	277	0.70	0.54	281	0.69	0.57	275	0.65	0.44	80	0.68	0.52	1207
Total	0.72	0.56	573	0.72	0.52	566	0.72	0.50	555	0.73	0.53	557	0.70	0.44	153	0.72	0.52	2404

Stabilometry – center coordinates X with eyes open (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.32	0.69	279	0.33	0.79	289	0.31	0.72	274	0.40	0.74	282	0.53	0.81	73	0.35	0.74	1197
Female	0.32	0.53	294	0.42	0.57	277	0.48	0.63	281	0.49	0.71	275	0.49	0.71	80	0.43	0.62	1207
Total	0.32	0.61	573	0.37	0.69	566	0.39	0.68	555	0.44	0.73	557	0.51	0.76	153	0.39	0.69	2404

Stabilometry – center coordinates Y with eyes open (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-1.27	1.62	279	-1.42	1.60	289	-1.32	1.52	274	-1.10	1.54	282	-1.27	1.66	73	-1.28	1.58	1197
Female	-2.30	1.41	294	-2.35	1.42	277	-2.31	1.37	281	-2.13	1.49	275	-2.17	1.60	80	-2.27	1.43	1207
Total	-1.80	1.60	573	-1.88	1.58	566	-1.82	1.53	555	-1.61	1.60	557	-1.74	1.69	153	-1.77	1.59	2404

Stabilometry – anterior-posterior length with eyes open (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.89	0.83	279	2.86	0.77	289	2.96	0.77	274	3.12	0.85	282	3.30	0.87	73	2.98	0.82	1197
Female	2.59	0.74	294	2.79	0.82	277	2.87	0.84	281	2.91	0.86	275	2.96	0.78	80	2.80	0.82	1207
Total	2.74	0.79	573	2.83	0.79	566	2.91	0.81	555	3.02	0.86	557	3.12	0.84	153	2.89	0.82	2404

Stabilometry – medio-lateral length with eyes open (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.37	0.66	279	2.38	0.62	289	2.42	0.75	274	2.76	0.74	282	3.15	1.01	73	2.52	0.75	1197
Female	2.15	0.61	294	2.28	0.59	277	2.40	0.68	281	2.71	0.80	275	2.74	0.74	80	2.40	0.71	1207
Total	2.26	0.64	573	2.33	0.61	566	2.41	0.71	555	2.73	0.77	557	2.94	0.90	153	2.46	0.73	2404

Stabilometry – total path length with eyes open (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	86.6	22.0	279	97.5	33.3	289	99.8	33.5	274	113.1	34.3	282	133.3	63.9	73	101.3	36.2	1197
Female	79.4	24.0	294	87.4	24.4	277	93.8	27.8	281	101.4	31.5	275	110.5	31.2	80	91.7	28.8	1207
Total	82.9	23.3	573	92.5	29.7	566	96.8	30.8	555	107.4	33.5	557	121.4	50.7	153	96.5	33.1	2404

Stabilometry – sway area area with eyes closed (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.71	2.10	279	4.03	2.18	289	4.64	2.96	274	6.15	4.05	281	7.78	5.30	73	4.82	3.33	1196
Female	3.00	1.56	294	3.47	1.85	277	4.12	2.56	281	4.98	2.98	272	5.05	3.02	75	3.95	2.47	1199
Total	3.34	1.87	573	3.76	2.04	566	4.38	2.78	555	5.57	3.61	553	6.39	4.50	148	4.38	2.96	2395

Stabilometry – total power spectram X with eyes closed (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.43	0.26	279	0.44	0.29	289	0.51	0.34	274	0.68	0.49	281	0.86	0.76	73	0.53	0.41	1196
Female	0.34	0.23	294	0.40	0.26	277	0.46	0.31	281	0.61	0.49	272	0.63	0.48	75	0.46	0.36	1199
Total	0.38	0.24	573	0.42	0.28	566	0.48	0.33	555	0.64	0.49	553	0.75	0.64	148	0.50	0.39	2395

Stabilometry – total power spectram Y with eyes closed (cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.61	0.60	279	0.58	0.36	289	0.70	0.49	274	0.85	0.59	281	1.05	0.73	73	0.71	0.55	1196
Female	0.50	0.35	294	0.51	0.31	277	0.61	0.43	281	0.72	0.53	272	0.67	0.50	75	0.59	0.43	1199
Total	0.55	0.49	573	0.55	0.33	566	0.66	0.46	555	0.79	0.57	553	0.86	0.65	148	0.65	0.50	2395

Stabilometry – center coordinates X with eyes closed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.24	0.68	279	0.19	0.77	289	0.21	0.72	274	0.29	0.76	281	0.52	0.72	73	0.25	0.73	1196
Female	0.28	0.54	294	0.36	0.61	277	0.41	0.66	281	0.40	0.69	272	0.41	0.74	75	0.36	0.63	1199

Total	0.26	0.61	573	0.28	0.70	566	0.31	0.70	555	0.34	0.73	553	0.46	0.73	148	0.31	0.69	2395
-------	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	-----	------	------	------

Stabilometry – center coordinates Y with eyes closed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.77	1.54	279	-0.87	1.60	289	-0.73	1.55	274	-0.70	1.64	281	-0.97	1.58	73	-0.78	1.58	1196
Female	-1.86	1.36	294	-1.85	1.36	277	-1.80	1.34	281	-1.71	1.41	272	-1.84	1.62	75	-1.81	1.38	1199
Total	-1.33	1.55	573	-1.35	1.56	566	-1.27	1.54	555	-1.20	1.61	553	-1.41	1.65	148	-1.30	1.57	2395

Stabilometry – anterior-posterior with eyes closed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.94	0.96	279	2.99	0.82	289	3.24	0.98	274	3.64	1.15	281	4.04	1.45	73	3.25	1.07	1196
Female	2.66	0.85	294	2.76	0.78	277	3.02	0.96	281	3.28	1.07	272	3.22	1.06	75	2.94	0.96	1199
Total	2.80	0.91	573	2.88	0.81	566	3.13	0.97	555	3.46	1.13	553	3.63	1.33	148	3.10	1.03	2395

Stabilometry – medio-lateral length with eyes closed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.59	0.76	279	2.67	0.80	289	2.83	0.91	274	3.29	1.15	281	3.59	1.33	73	2.89	1.00	1196
Female	2.32	0.71	294	2.54	0.74	277	2.66	0.84	281	3.04	1.02	272	3.15	1.03	75	2.67	0.89	1199
Total	2.45	0.75	573	2.61	0.78	566	2.74	0.88	555	3.17	1.09	553	3.37	1.20	148	2.78	0.95	2395

Stabilometry – total path length with eyes closed (cm)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	108.6	30.1	279	123.2	41.0	289	132.1	47.7	274	154.6	63.1	281	192.3	95.2	73	133.4	55.7	1196
Female	93.7	27.5	294	107.3	32.4	277	115.7	39.0	281	130.1	45.0	272	142.8	50.9	75	113.3	40.3	1199
Total	100.9	29.7	573	115.4	37.8	566	123.8	44.3	555	142.5	56.2	553	167.2	79.8	148	123.4	49.6	2395

5) Physical activity accessed by electric pedometer (Suzuken corp.)

Electric pedometer – total energy expenditure average (kcal)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2220.2	195.4	251	2149.7	204.6	270	1965.0	188.7	263	1782.8	197.7	254	1560.1	153.5	63	2003.3	276.7	1101
Female	1743.6	184.9	266	1697.5	168.7	262	1646.6	159.5	266	1494.4	148.1	249	1318.8	134.3	60	1629.9	201.7	1103
Total	1975.0	304.8	517	1927.0	293.9	532	1804.9	236.3	529	1640.1	226.7	503	1442.4	188.1	123	1816.4	305.7	2204

Electric pedometers – exercise energy expenditure average (kcal)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
--	---------	--	--	---------	--	--	---------	--	--	---------	--	--	-------	--	--	-------	--	--

	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	283.9	108.7	251	294.1	118.8	270	248.9	114.8	263	202.6	118.8	254	134.0	80.3	63	250.7	122.1	1101
Female	214.4	82.0	266	212.1	81.2	262	207.9	88.7	266	150.5	81.3	249	96.5	50.5	60	191.4	88.6	1103
Total	248.1	101.9	517	253.7	109.9	532	228.3	104.4	529	176.8	105.2	503	115.7	69.7	123	221.0	110.7	2204

Electric pedometers – steps average (step)

	40–49yr			50–59yr			60–69yr			70–79yr			80–yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	9186	3098	251	9792	3471	270	9064	3602	263	7831	3833	255	5705	2972	64	8790	3627	1103
Female	9100	2872	269	9392	3005	263	9241	3311	266	7193	3002	253	5338	2302	60	8566	3225	1111
Total	9141	2980	520	9595	3253	533	9153	3456	529	7513	3456	508	5528	2665	124	8677	3432	2214

6) Physical activity questionnaire

Distribution of 4 categories of leisure-time physical activity

		40–49yr		50–59yr		60–69yr		70–79yr		80–yr		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
2.5METs	Male	70	25.1	130	45.0	163	59.5	210	73.9	62	83.8	635	52.9
	Female	68	23.1	117	42.2	157	55.9	173	62.2	54	61.4	569	46.7
	Total	138	24.0	247	43.6	320	57.7	383	68.1	116	71.6	1204	49.8
4.5METs	Male	79	28.3	97	33.6	113	41.2	83	29.2	9	12.2	381	31.8
	Female	64	21.7	84	30.3	97	34.5	78	28.1	16	18.2	339	27.8
	Total	143	24.9	181	32.0	210	37.8	161	28.6	25	15.4	720	29.8
6.5METs	Male	32	11.5	20	6.9	11	4.0	4	1.4	0	0.0	67	5.6
	Female	5	1.7	6	2.2	2	0.7	0	0.0	1	1.1	14	1.1
	Total	37	6.4	26	4.6	13	2.3	4	0.7	1	0.6	81	3.3
8.5METs	Male	1	0.4	0	0.0	1	0.4	0	0.0	0	0.0	2	0.2
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	1	0.2	0	0.0	1	0.2	0	0.0	0	0.0	2	0.1
Total	Male	279	100.0	289	100.0	274	100.0	284	100.0	74	100.0	1200	100.0
	Female	295	100.0	277	100.0	281	100.0	278	100.0	88	100.0	1219	100.0
	Total	574	100.0	566	100.0	555	100.0	562	100.0	162	100.0	2419	100.0

Leisure-time physical activity score (2.5METs) (METs*min/1000/year)

	40–49yr			50–59yr			60–69yr			70–79yr			80–yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.0	9.2	279	11.1	20.7	289	28.2	42.7	274	38.5	45.7	284	32.5	38.2	73	21.1	36.1	1199
Female	4.2	11.5	295	12.2	23.9	277	17.8	26.8	280	19.3	29.2	277	22.4	28.9	87	13.9	24.8	1216
Total	4.1	10.4	574	11.6	22.3	566	22.9	35.9	554	29.0	39.6	561	27.0	33.7	160	17.5	31.1	2415

Leisure-time physical activity score (4.5METs) (METs*min/1000/year)

	40–49yr			50–59yr			60–69yr			70–79yr			80–yr			Total		
--	---------	--	--	---------	--	--	---------	--	--	---------	--	--	-------	--	--	-------	--	--

	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	7.1	20.9	279	8.6	18.6	289	21.0	41.8	274	18.5	43.9	284	4.5	15.3	73	13.2	33.0	1199
Female	7.8	22.0	295	9.7	20.8	277	15.7	32.0	280	11.5	25.1	277	8.1	27.4	87	10.9	25.6	1216
Total	7.4	21.4	574	9.1	19.7	566	18.4	37.2	554	15.0	36.0	561	6.5	22.7	160	12.0	29.5	2415

Leisure-time physical activity score (6.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.8	15.0	279	2.3	10.3	289	2.8	20.9	274	0.3	3.4	284	0.0	0.0	73	2.2	13.5	1199
Female	1.1	11.6	295	0.6	5.1	277	1.1	17.9	280	0.0	0.0	277	0.5	4.7	87	0.7	10.7	1216
Total	2.4	13.4	574	1.5	8.2	566	1.9	19.5	554	0.2	2.4	561	0.3	3.5	160	1.4	12.2	2415

Leisure-time physical activity score (8.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.2	3.0	279	0.0	0.0	289	0.1	1.5	274	0.0	0.0	284	0.0	0.0	73	0.1	1.6	1199
Female	0.0	0.0	295	0.0	0.0	277	0.0	0.0	280	0.0	0.0	277	0.0	0.0	87	0.0	0.0	1216
Total	0.1	2.1	574	0.0	0.0	566	0.0	1.0	554	0.0	0.0	561	0.0	0.0	160	0.0	1.1	2415

Leisure-time physical activity score (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	15.1	28.0	279	21.9	29.1	289	52.1	57.5	274	57.3	63.7	284	37.0	39.9	73	36.5	50.1	1199
Female	13.1	28.5	295	22.5	33.1	277	34.6	44.3	280	30.8	37.0	277	31.0	40.3	87	25.5	37.3	1216
Total	14.1	28.3	574	22.2	31.1	566	43.3	51.9	554	44.2	53.9	561	33.8	40.1	160	31.0	44.4	2415

Time spent on the leisure-time physical activity (hour/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	63.0	110.6	279	111.4	154.9	289	273.1	303.1	274	326.0	346.7	284	233.5	256.1	73	195.4	270.5	1199
Female	59.6	120.4	295	119.0	182.2	277	179.8	215.2	280	171.2	208.9	277	180.8	217.2	87	134.9	193.1	1216
Total	61.2	115.7	574	115.1	168.7	566	226.0	266.2	554	249.6	297.1	561	204.8	236.5	160	164.9	236.6	2415

Leisure-time physical activity score (METs*min/1000/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.04	0.08	279	0.07	0.09	289	0.16	0.17	274	0.17	0.19	284	0.11	0.12	73	0.11	0.15	1199
Female	0.04	0.08	295	0.07	0.10	277	0.10	0.13	280	0.09	0.11	277	0.09	0.12	87	0.08	0.11	1216
Total	0.04	0.08	574	0.07	0.09	566	0.13	0.15	554	0.13	0.16	561	0.10	0.12	160	0.09	0.13	2415

Time spent on the leisure-time physical activity (hour/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
--	---------	--	--	---------	--	--	---------	--	--	---------	--	--	-------	--	--	-------	--	--

	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.2	0.3	279	0.3	0.5	289	0.8	0.9	274	1.0	1.0	284	0.7	0.8	73	0.6	0.8	1199
Female	0.2	0.4	295	0.4	0.5	277	0.5	0.6	280	0.5	0.6	277	0.5	0.6	87	0.4	0.6	1216
Total	0.2	0.3	574	0.3	0.5	566	0.7	0.8	554	0.7	0.9	561	0.6	0.7	160	0.5	0.7	2415

Distribution of 4 categories of the job physical activity

		40-49yr		50-59yr		60-69yr		70-79yr		80-yr		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
1.5METs	Male	278	99.6	281	97.2	241	88.0	191	67.3	37	50.0	1028	85.7
	Female	291	98.6	273	98.6	270	96.1	238	85.6	68	77.3	1140	93.5
	Total	569	99.1	554	97.9	511	92.1	429	76.3	105	64.8	2168	89.6
2.5METs	Male	268	96.1	280	96.9	245	89.4	235	82.7	53	71.6	1081	90.1
	Female	294	99.7	277	100.0	278	98.9	275	98.9	85	96.6	1209	99.2
	Total	562	97.9	557	98.4	523	94.2	510	90.7	138	85.2	2290	94.7
4.5METs	Male	88	31.5	84	29.1	92	33.6	81	28.5	21	28.4	366	30.5
	Female	224	75.9	211	76.2	210	74.7	189	68.0	45	51.1	879	72.1
	Total	312	54.4	295	52.1	302	54.4	270	48.0	66	40.7	1245	51.5
7.5METs	Male	16	5.7	34	11.8	19	6.9	4	1.4	1	1.4	74	6.2
	Female	15	5.1	11	4.0	6	2.1	1	0.4	0	0.0	33	2.7
	Total	31	5.4	45	8.0	25	4.5	5	0.9	1	0.6	107	4.4
Total	Male	279	100.0	289	100.0	274	100.0	284	100.0	74	100.0	1200	100.0
	Female	295	100.0	277	100.0	281	100.0	278	100.0	88	100.0	1219	100.0
	Total	574	100.0	566	100.0	555	100.0	562	100.0	162	100.0	2419	100.0

On the job physical activity score (1.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	167.9	84.8	279	142.6	80.5	288	71.6	75.7	274	17.9	34.2	284	10.2	28.3	73	94.6	92.8	1198
Female	67.4	62.7	294	55.3	60.5	277	32.5	47.2	278	16.8	28.8	276	14.7	23.5	87	41.3	54.2	1212
Total	116.3	89.7	573	99.8	83.6	565	51.9	65.9	552	17.3	31.6	560	12.7	25.8	160	67.8	80.4	2410

On the job physical activity score (2.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	117.2	108.5	279	116.2	105.0	288	87.3	92.3	274	57.8	73.6	284	45.5	71.2	73	91.7	98.0	1198
Female	214.6	89.7	294	215.4	92.8	277	180.2	93.3	278	136.6	75.4	276	104.8	70.0	87	181.3	94.6	1212
Total	167.2	110.5	573	164.8	110.8	565	134.1	103.7	552	96.7	84.3	560	77.7	76.3	160	136.7	106.2	2410

On the job physical activity score (4.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	49.5	130.2	279	44.1	112.5	288	31.4	93.4	274	16.1	54.4	284	13.5	47.2	73	34.0	99.9	1198
Female	24.9	55.6	294	22.1	44.5	277	18.3	32.9	278	17.2	42.8	276	6.7	11.4	87	19.7	43.5	1212

Total	36.9	99.9	573	33.3	86.8	565	24.8	70.1	552	16.6	49.0	560	9.8	33.0	160	26.8	77.2	2410
-------	------	------	-----	------	------	-----	------	------	-----	------	------	-----	-----	------	-----	------	------	------

On the job physical activity score (7.5METs) (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.0	21.6	279	8.6	36.5	288	3.2	16.8	274	2.7	27.0	284	0.3	2.5	73	4.4	25.9	1198
Female	2.6	18.5	294	1.0	9.5	277	0.4	3.4	278	0.0	0.5	276	0.0	0.0	87	1.0	10.3	1212
Total	3.3	20.1	573	4.9	27.2	565	1.8	12.1	552	1.4	19.2	560	0.1	1.7	160	2.7	19.8	2410

On the job physical activity score (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	338.6	123.6	279	311.6	116.7	288	193.4	141.0	274	94.4	117.6	284	69.5	105.4	73	224.6	160.8	1198
Female	309.4	104.8	294	293.7	108.0	277	231.5	105.7	278	170.6	92.0	276	126.2	79.5	87	243.2	118.8	1212
Total	323.6	115.2	573	302.8	112.7	565	212.6	125.8	552	131.9	112.3	560	100.3	96.2	160	234.0	141.5	2410

Time spent on the job (hour/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2839.2	593.4	279	2541.9	604.0	288	1500.7	1020	274	649.2	738.8	284	467.3	657.3	73	1797.9	1178	1198
Female	2277.1	742.1	294	2134.0	796.0	277	1631.9	767.8	278	1160.6	615.5	276	887.0	560.0	87	1742.4	870.5	1212
Total	2550.8	729.6	573	2342.0	733.0	565	1566.8	903.2	552	901.3	726.7	560	695.5	639.7	160	1770.0	1035	2410

On the job physical activity score (METs*min/1000/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.01	0.37	279	0.93	0.35	288	0.58	0.42	274	0.28	0.35	284	0.21	0.31	73	0.67	0.48	1198
Female	0.92	0.31	294	0.87	0.32	277	0.69	0.31	278	0.51	0.27	276	0.38	0.24	87	0.72	0.35	1212
Total	0.96	0.34	573	0.90	0.34	565	0.63	0.37	552	0.39	0.33	560	0.30	0.29	160	0.70	0.42	2410

Time spent on the job (hour/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	8.5	1.8	279	7.6	1.8	288	4.5	3.0	274	1.9	2.2	284	1.4	2.0	73	5.4	3.5	1198
Female	6.8	2.2	294	6.4	2.4	277	4.9	2.3	278	3.5	1.8	276	2.6	1.7	87	5.2	2.6	1212
Total	7.6	2.2	573	7.0	2.2	565	4.7	2.7	552	2.7	2.2	560	2.1	1.9	160	5.3	3.1	2410

Residual physical activity score (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	264.0	48.3	279	277.6	54.6	288	339.7	83.8	274	396.2	71.1	284	400.8	62.5	73	324.3	85.5	1198
Female	317.2	66.4	294	319.1	68.3	277	344.3	61.6	278	372.9	54.7	276	390.8	52.2	87	341.8	67.3	1212

Total	291.3	64.1	573	297.9	65.1	565	342.0	73.4	552	384.7	64.6	560	395.4	57.1	160	333.1	77.4	2410
-------	-------	------	-----	-------	------	-----	-------	------	-----	-------	------	-----	-------	------	-----	-------	------	------

Time spent on residual physical activity (hour/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	8.7	1.6	279	9.2	1.8	288	11.2	2.8	274	13.1	2.4	284	13.3	2.1	73	10.7	2.8	1198
Female	10.5	2.2	294	10.6	2.3	277	11.4	2.0	278	12.3	1.8	276	12.9	1.7	87	11.3	2.2	1212
Total	9.6	2.1	573	9.9	2.2	565	11.3	2.4	552	12.7	2.1	560	13.1	1.9	160	11.0	2.6	2410

Sleeping time (hour/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	6.6	0.9	279	6.9	0.9	289	7.5	1.0	274	8.0	1.2	284	8.7	1.4	73	7.3	1.2	1199
Female	6.6	0.9	295	6.7	0.9	277	7.2	1.1	280	7.7	1.1	277	7.9	1.1	87	7.1	1.1	1216
Total	6.6	0.9	574	6.8	0.9	566	7.4	1.1	554	7.9	1.2	561	8.2	1.3	160	7.2	1.2	2415

Sleep activity score (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	100.3	13.6	279	104.7	13.3	289	113.2	15.6	274	120.9	18.0	284	130.9	20.6	73	111.0	18.1	1199
Female	99.2	14.3	295	102.0	14.0	277	109.4	16.5	280	116.5	16.9	277	119.4	17.1	87	107.5	17.2	1216
Total	99.7	14.0	574	103.3	13.7	566	111.2	16.2	554	118.7	17.6	561	124.7	19.6	160	109.3	17.7	2415

Total physical activity score (METs*min/1000/year)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	717.9	103.0	279	715.8	95.7	288	698.5	80.2	274	668.8	67.5	284	638.3	57.3	73	696.5	89.4	1198
Female	738.8	60.7	294	737.3	54.6	277	719.5	54.7	278	690.6	51.5	276	667.4	46.3	87	718.0	59.6	1212
Total	728.7	84.6	573	726.3	79.0	565	709.1	69.3	552	679.6	61.1	560	654.2	53.4	160	707.3	76.6	2410

Total physical activity score (METs*min/1000/day)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.14	0.31	279	2.13	0.28	288	2.08	0.24	274	1.99	0.20	284	1.90	0.17	73	2.07	0.27	1198
Female	2.20	0.18	294	2.19	0.16	277	2.14	0.16	278	2.06	0.15	276	1.99	0.14	87	2.14	0.18	1212
Total	2.17	0.25	573	2.16	0.24	565	2.11	0.21	552	2.02	0.18	560	1.95	0.16	160	2.10	0.23	2410

Annual intensity index (METs)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.5	0.2	279	1.5	0.2	288	1.4	0.2	274	1.4	0.1	284	1.3	0.1	73	1.4	0.2	1198

Female	1.5	0.1	294	1.5	0.1	277	1.5	0.1	278	1.4	0.1	276	1.4	0.1	87	1.5	0.1	1212
Total	1.5	0.2	573	1.5	0.2	565	1.5	0.1	552	1.4	0.1	560	1.4	0.1	160	1.5	0.2	2410

Annual active intensity index (METs)

	40-49yr			50-59yr			60-69yr			70-79yr			80-yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.8	0.3	279	1.8	0.3	288	1.8	0.2	274	1.7	0.2	284	1.6	0.2	73	1.7	0.3	1198
Female	1.8	0.2	294	1.8	0.1	277	1.8	0.1	278	1.7	0.1	276	1.7	0.1	87	1.8	0.1	1212
Total	1.8	0.2	573	1.8	0.2	565	1.8	0.2	552	1.7	0.2	560	1.7	0.1	160	1.8	0.2	2410