

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

	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	734.6	105.0	172	716.0	97.9	216	693.9	89.3	227	660.2	56.3	200	635.4	47.8	35	697.4	92.0	850
Female	741.8	60.3	195	744.0	59.2	189	719.1	60.9	196	689.4	49.2	202	668.2	42.1	24	721.5	61.8	806
Total	738.4	84.2	367	729.1	83.2	405	705.6	78.4	423	674.9	54.8	402	648.7	48.0	59	709.1	79.6	1656

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

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	2.19	0.31	172	2.13	0.29	216	2.07	0.27	227	1.96	0.17	200	1.89	0.14	35	2.08	0.27	850
Female	2.21	0.18	195	2.21	0.18	189	2.14	0.18	196	2.05	0.15	202	1.99	0.13	24	2.15	0.18	806
Total	2.20	0.25	367	2.17	0.25	405	2.10	0.23	423	2.01	0.16	402	1.93	0.14	59	2.11	0.24	1656

Intensity index (METs)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	1.5	0.2	172	1.5	0.2	216	1.4	0.2	227	1.4	0.1	200	1.3	0.1	35	1.4	0.2	850
Female	1.5	0.1	195	1.5	0.1	189	1.5	0.1	196	1.4	0.1	202	1.4	0.1	24	1.5	0.1	806
Total	1.5	0.2	367	1.5	0.2	405	1.5	0.2	423	1.4	0.1	402	1.3	0.1	59	1.5	0.2	1656

Active intensity index (METs)

	40-49yr			50-59yr			60-69yr			70-79yr			80yr-			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	1.8	0.3	172	1.8	0.3	216	1.8	0.3	227	1.7	0.2	200	1.6	0.1	35	1.8	0.3	850
Female	1.8	0.2	195	1.8	0.2	189	1.8	0.2	196	1.7	0.1	202	1.7	0.1	24	1.8	0.2	806
Total	1.8	0.2	367	1.8	0.2	405	1.8	0.2	423	1.7	0.1	402	1.7	0.1	59	1.8	0.2	1656

**XI. Anthropometry, Body
Composition and Resting
Metabolic Profiles**

XI. Anthropometry and Body composition

1) Anthropometric measurements

2) Body composition

1. Body composition by DXA

2. Extra- and intra-cellular fluid volume by multi-frequency impedance method.

3) Thickness of subcutaneous fat, preperitoneal fat and muscle tissue

4) Abdominal fat distribution

5) Resting metabolic profiles

1) Anthropometric measurements

Height (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	169.7	5.6	172	167.7	6.2	216	164.3	5.1	227	161.7	5.4	200	159.5	6.2	35	165.4	6.4	850
Female	156.2	5.2	195	153.9	5.0	189	151.8	4.9	197	147.3	4.9	202	144.0	5.0	24	152.0	6.1	807
Total	162.5	8.6	367	161.2	8.9	405	158.5	8.0	424	154.5	8.8	402	153.2	9.5	59	158.9	9.2	1657

Weight (kg)

	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	67.3	9.4	172	65.9	9.5	216	62.8	7.8	227	58.9	8.6	200	57.5	8.8	35	63.4	9.4	850
Female	53.3	8.5	195	53.7	7.5	189	52.4	7.5	197	50.7	7.9	202	44.9	7.4	24	52.3	8.0	807
Total	59.9	11.3	367	60.2	10.5	405	58.0	9.2	424	54.8	9.2	402	52.4	10.3	59	58.0	10.4	1657

Trochanterion height (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	83.4	4.0	172	82.3	4.2	215	80.2	3.4	226	79.6	3.4	200	79.4	4.5	35	81.2	4.1	848
Female	76.7	3.7	195	74.8	3.4	189	74.3	3.3	197	72.5	3.3	202	71.8	2.7	24	74.5	3.7	807
Total	79.9	5.1	367	78.8	5.4	404	77.5	4.5	423	76.0	4.9	402	76.3	5.4	59	77.9	5.2	1655

Iliocristal height (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	98.2	4.4	172	97.1	4.5	215	94.8	3.9	226	94.3	3.7	200	93.8	5.0	35	95.9	4.4	848
Female	90.7	3.9	195	88.7	3.8	189	88.1	3.6	197	86.1	3.5	202	84.8	3.4	24	88.3	4.1	807
Total	94.2	5.6	367	93.2	5.9	404	91.7	5.0	423	90.2	5.5	402	90.1	6.3	59	92.2	5.7	1655

Waist circumference at midway (cm)

	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	82.2	7.6	172	83.9	8.0	216	84.1	8.1	227	82.9	9.2	200	81.9	10.3	35	83.3	8.4	850
Female	71.8	8.3	195	74.7	8.4	189	76.7	8.2	197	79.6	10.4	202	75.1	7.6	24	75.7	9.3	807
Total	76.6	9.5	367	79.6	9.4	405	80.6	8.9	424	81.2	10.0	402	79.1	9.9	59	79.6	9.6	1657

Waist circumference at umbilicus (cm)

	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	84.2	7.7	172	85.8	7.9	216	86.0	8.0	227	84.6	9.0	200	84.1	9.9	35	85.2	8.3	850
Female	77.7	9.3	195	81.4	9.2	189	84.1	9.5	197	86.2	10.5	202	79.8	8.3	24	82.3	10.1	807
Total	80.7	9.2	367	83.7	8.8	405	85.1	8.8	424	85.4	9.8	402	82.4	9.5	59	83.8	9.3	1657

Hip circumference (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	94.3	5.0	172	93.5	5.0	215	92.0	4.4	226	90.0	4.8	200	89.6	5.0	35	92.3	5.1	848
Female	91.3	5.9	195	91.5	4.5	189	90.1	4.9	197	89.5	5.8	202	86.2	5.3	24	90.5	5.4	807
Total	92.7	5.7	367	92.6	4.9	404	91.1	4.8	423	89.8	5.3	402	88.2	5.4	59	91.4	5.3	1655

Thigh circumference at midway (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	50.3	3.9	172	48.9	3.7	216	47.6	3.6	226	45.7	3.9	200	45.4	4.5	35	47.9	4.1	849
Female	48.4	4.2	195	47.8	4.0	189	46.7	3.6	197	45.4	4.2	202	43.3	3.9	24	47.0	4.2	807
Total	49.3	4.1	367	48.4	3.9	405	47.2	3.6	423	45.5	4.0	402	44.5	4.4	59	47.5	4.2	1656

Thigh circumference at 10 cm above knee (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	45.3	3.5	172	44.5	3.5	216	43.5	3.2	226	42.1	3.6	200	42.4	4.2	35	43.8	3.7	849
Female	44.0	3.8	195	44.0	3.7	189	43.0	3.4	197	42.1	3.9	202	40.5	3.5	24	43.2	3.8	807
Total	44.6	3.7	367	44.3	3.6	405	43.3	3.3	423	42.1	3.7	402	41.6	4.0	59	43.5	3.7	1656

Calf circumference (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	36.8	2.8	172	36.2	2.6	216	35.3	2.5	226	33.8	2.5	200	33.7	2.8	35	35.4	2.8	849
Female	34.4	2.6	195	34.2	2.4	189	33.5	2.4	197	32.5	2.5	202	31.0	2.6	24	33.6	2.6	807
Total	35.6	3.0	367	35.3	2.7	405	34.4	2.6	423	33.2	2.6	402	32.6	3.0	59	34.5	2.9	1656

Upper-arm circumference (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	29.3	2.4	172	28.8	2.3	216	28.3	2.2	227	27.1	2.4	200	26.7	2.5	35	28.3	2.5	850
Female	26.6	2.9	195	27.3	2.5	189	27.5	2.6	197	27.2	2.9	202	24.9	2.4	24	27.1	2.8	807
Total	27.9	3.0	367	28.1	2.5	405	27.9	2.4	424	27.1	2.7	402	26.0	2.6	59	27.7	2.7	1657

Sagittal abdominal diameter (cm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	20.8	2.6	172	21.4	2.7	216	21.6	2.8	227	21.1	3.1	200	21.0	3.3	35	21.2	2.8	850
Female	17.8	3.0	195	19.2	3.1	189	20.3	3.1	197	21.4	3.7	202	19.9	2.6	24	19.7	3.5	807
Total	19.2	3.2	367	20.4	3.1	405	21.0	3.0	424	21.3	3.4	402	20.6	3.0	59	20.5	3.3	1657

Body mass index (kg/m²)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	23.3	2.8	172	23.4	2.7	216	23.3	2.7	227	22.5	2.9	200	22.6	3.4	35	23.1	2.8	850
Female	21.9	3.4	195	22.7	3.2	189	22.7	2.9	197	23.3	3.5	202	21.6	2.7	24	22.6	3.3	807
Total	22.6	3.2	367	23.1	3.0	405	23.0	2.8	424	22.9	3.2	402	22.2	3.2	59	22.9	3.1	1657

Body composition

i) Dual energy x-ray absorptiometry (DXA) (Hologic QDR-4500)

Head fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.988	0.080	166	0.994	0.087	210	0.962	0.080	222	0.942	0.083	194	0.927	0.074	33	0.969	0.085	825
Female	0.843	0.071	188	0.870	0.077	187	0.854	0.070	194	0.848	0.080	193	0.798	0.063	23	0.852	0.075	785
Total	0.911	0.104	354	0.935	0.103	397	0.911	0.092	416	0.895	0.094	387	0.874	0.094	56	0.912	0.099	1610

Head lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	3.927	0.301	166	3.932	0.324	210	3.808	0.303	222	3.717	0.315	194	3.670	0.284	33	3.837	0.323	825
Female	3.439	0.278	188	3.473	0.287	187	3.349	0.258	194	3.291	0.287	193	3.118	0.230	23	3.379	0.288	785
Total	3.668	0.378	354	3.716	0.383	397	3.594	0.364	416	3.505	0.369	387	3.443	0.378	56	3.614	0.382	1610

Left arm fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.745	0.242	166	0.751	0.263	210	0.728	0.249	222	0.723	0.221	194	0.749	0.229	33	0.737	0.244	825
Female	0.977	0.399	188	1.057	0.340	187	1.063	0.325	194	1.069	0.368	193	0.821	0.260	23	1.036	0.360	785
Total	0.869	0.354	354	0.895	0.338	397	0.884	0.332	416	0.896	0.349	387	0.779	0.242	56	0.882	0.340	1610

Left arm lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	3.103	0.435	166	3.009	0.404	210	2.805	0.350	222	2.615	0.345	194	2.435	0.364	33	2.857	0.430	825
Female	1.828	0.293	188	1.787	0.258	187	1.761	0.251	194	1.692	0.258	193	1.544	0.263	23	1.760	0.272	785
Total	2.426	0.735	354	2.433	0.700	397	2.318	0.605	416	2.155	0.554	387	2.069	0.548	56	2.322	0.657	1610

Right arm fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.732	0.250	166	0.726	0.260	210	0.711	0.240	222	0.706	0.237	194	0.722	0.253	33	0.718	0.247	825
Female	0.958	0.386	188	1.036	0.327	187	1.031	0.310	194	1.066	0.363	193	0.836	0.288	23	1.017	0.349	785
Total	0.852	0.348	354	0.872	0.332	397	0.860	0.318	416	0.885	0.355	387	0.769	0.271	56	0.864	0.336	1610

Right arm lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	3.342	0.459	166	3.251	0.451	210	3.033	0.369	222	2.793	0.363	194	2.567	0.376	33	3.075	0.467	825
Female	2.002	0.302	188	1.980	0.280	187	1.941	0.274	194	1.844	0.262	193	1.680	0.295	23	1.933	0.289	785
Total	2.630	0.771	354	2.652	0.740	397	2.524	0.636	416	2.319	0.571	387	2.202	0.557	56	2.519	0.692	1610

Trunk fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	7.114	2.396	166	7.265	2.723	210	7.179	2.513	222	6.821	2.592	194	7.048	2.820	33	7.099	2.575	825
Female	6.971	2.677	188	8.097	2.609	187	8.470	2.482	194	8.542	2.721	193	6.601	2.159	23	7.985	2.688	785
Total	7.038	2.547	354	7.657	2.699	397	7.781	2.577	416	7.680	2.790	387	6.864	2.557	56	7.531	2.667	1610

Trunk lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	26.190	3.283	166	25.661	2.974	210	24.325	2.479	222	23.036	2.762	194	22.020	2.552	33	24.645	3.122	825
Female	19.178	2.248	188	18.875	1.937	187	18.127	1.915	194	17.231	2.098	193	15.939	1.692	23	18.272	2.207	785
Total	22.466	4.471	354	22.464	4.235	397	21.434	3.816	416	20.141	3.801	387	19.523	3.748	56	21.538	4.185	1610

Left leg fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	2.149	0.667	166	2.108	0.632	210	1.960	0.608	222	1.941	0.568	194	2.101	0.669	33	2.037	0.625	825
Female	2.949	0.757	188	2.813	0.703	187	2.627	0.706	194	2.544	0.747	193	2.172	0.770	23	2.715	0.750	785
Total	2.574	0.819	354	2.440	0.753	397	2.271	0.734	416	2.241	0.728	387	2.130	0.706	56	2.367	0.767	1610

Left leg lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	8.558	1.199	166	8.151	1.143	210	7.667	0.885	222	7.183	0.905	194	6.659	1.007	33	7.816	1.164	825
Female	5.983	0.927	188	5.748	0.753	187	5.601	0.727	194	5.253	0.666	193	4.986	0.687	23	5.624	0.820	785
Total	7.191	1.669	354	7.019	1.549	397	6.704	1.314	416	6.220	1.251	387	5.972	1.212	56	6.747	1.491	1610

Right leg fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	2.066	0.678	166	2.026	0.640	210	1.921	0.592	222	1.910	0.583	194	2.033	0.631	33	1.979	0.624	825
Female	2.907	0.746	188	2.782	0.701	187	2.607	0.725	194	2.560	0.761	193	2.233	0.828	23	2.698	0.752	785
Total	2.513	0.828	354	2.382	0.768	397	2.241	0.741	416	2.234	0.751	387	2.115	0.718	56	2.329	0.777	1610

Right leg lean weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	8.724	1.215	166	8.287	1.144	210	7.819	0.916	222	7.321	0.926	194	6.901	1.009	33	7.966	1.176	825
Female	6.076	0.930	188	5.858	0.785	187	5.702	0.742	194	5.340	0.744	193	5.011	0.690	23	5.719	0.850	785
Total	7.318	1.703	354	7.143	1.566	397	6.832	1.349	416	6.333	1.299	387	6.124	1.290	56	6.871	1.524	1610

Total fat weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	13.8	4.0	166	13.9	4.4	210	13.5	4.0	222	13.0	4.0	194	13.6	4.4	33	13.5	4.1	825
Female	15.6	4.6	188	16.7	4.3	187	16.7	4.1	194	16.6	4.6	193	13.5	4.0	23	16.3	4.4	785
Total	14.8	4.4	354	15.2	4.5	397	14.9	4.4	416	14.8	4.7	387	13.5	4.2	56	14.9	4.5	1610

Lean body weight (kg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	53.8	6.4	166	52.3	6.0	210	49.5	4.7	222	46.7	5.1	194	44.3	5.0	33	50.2	6.2	825
Female	38.5	4.6	188	37.7	3.9	187	36.5	3.8	194	34.7	3.9	193	32.3	3.6	23	36.7	4.4	785
Total	45.7	9.4	354	45.4	8.9	397	43.4	7.8	416	40.7	7.5	387	39.3	7.4	56	43.6	8.6	1610

Percent body fat (%)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	20.1	4.2	166	20.7	4.6	210	21.1	4.7	222	21.4	4.7	194	23.0	4.9	33	20.9	4.6	825
Female	28.4	4.9	188	30.3	4.9	187	31.0	4.5	194	31.9	5.1	193	28.9	4.6	23	30.4	5.0	785
Total	24.5	6.2	354	25.2	6.7	397	25.7	6.8	416	26.7	7.2	387	25.4	5.6	56	25.5	6.7	1610

2. Body fluid volume by multi-frequency impedance method

Extra-cellular fluid by multi-frequency impedance method (l)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	16.6	2.1	172	16.5	2.1	214	15.7	1.8	225	14.9	1.9	197	14.6	1.9	35	15.9	2.1	843
Female	12.2	1.6	195	12.3	1.4	189	12.0	1.4	196	11.5	1.4	199	10.5	1.4	24	11.9	1.5	803
Total	14.3	2.8	367	14.5	2.8	403	14.0	2.5	421	13.2	2.4	396	13.0	2.7	59	14.0	2.7	1646

Intra-cellular fluid by multi-frequency impedance method (l)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	22.6	3.6	172	21.2	3.1	214	19.4	2.8	225	16.9	2.6	197	15.6	2.5	35	19.8	3.7	843
Female	14.1	2.2	195	13.8	1.9	189	13.2	2.0	196	11.9	1.7	199	10.5	1.8	24	13.2	2.2	803
Total	18.1	5.2	367	17.7	4.5	403	16.5	3.9	421	14.4	3.4	396	13.5	3.4	59	16.5	4.5	1646

3) Thickness of subcutaneous fat, preperitoneal fat, and muscle tissue

Thickness of subcutaneous fat at anterior upper-arm (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	3.1	1.3	172	2.9	1.3	216	2.8	1.2	227	2.6	1.0	200	2.7	0.9	35	2.9	1.2	850
Female	4.5	2.4	195	4.2	1.6	189	4.4	1.8	197	4.2	1.7	202	3.1	1.1	24	4.3	1.9	807
Total	3.8	2.1	367	3.5	1.5	405	3.6	1.7	424	3.4	1.6	402	2.8	1.0	59	3.5	1.7	1657

Thickness of musculus biceps brachii and brachialis (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	26.4	5.0	172	25.7	4.4	216	25.0	4.1	227	23.2	4.1	200	21.7	4.9	35	24.9	4.6	850
Female	19.1	3.9	195	19.9	3.4	189	19.1	3.8	197	18.2	3.5	202	16.7	2.9	24	19.0	3.7	807
Total	22.6	5.7	367	23.0	4.9	405	22.3	4.9	424	20.7	4.6	402	19.7	4.9	59	22.0	5.1	1657

Thickness of subcutaneous fat at forearm (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	3.2	1.0	172	3.3	1.2	216	3.2	1.1	227	3.1	1.0	200	3.3	1.2	35	3.2	1.1	850
Female	3.9	1.3	195	3.9	1.4	189	4.1	1.7	197	3.8	1.6	202	3.0	1.1	24	3.9	1.5	807
Total	3.6	1.3	367	3.6	1.3	405	3.6	1.5	424	3.4	1.4	402	3.2	1.1	59	3.5	1.4	1657

Thickness of musculus brachioradialis (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	20.0	3.3	172	18.3	2.8	216	17.9	3.1	227	16.5	3.3	200	15.5	3.0	35	18.0	3.4	850
Female	15.4	2.8	195	14.8	2.6	189	14.7	3.0	197	14.0	2.8	202	12.7	1.9	24	14.7	2.8	807
Total	17.6	3.8	367	16.7	3.2	405	16.4	3.4	424	15.3	3.3	402	14.4	2.9	59	16.4	3.5	1657

Thickness of subcutaneous fat at right of umbilicus (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	16.4	6.4	172	15.7	5.7	216	14.5	5.1	227	13.1	5.2	200	12.4	4.2	35	14.8	5.7	850
Female	19.7	9.2	195	22.4	8.2	189	23.6	7.9	197	21.9	8.4	202	15.6	5.3	24	21.7	8.5	807
Total	18.1	8.2	367	18.8	7.7	405	18.7	8.0	424	17.5	8.3	402	13.7	4.9	59	18.1	8.0	1657

Thickness of musculus rectus abdominis at right of umbilicus (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	11.4	1.9	172	10.8	1.9	216	9.9	1.8	227	9.2	1.8	200	8.9	1.5	35	10.2	2.0	850
Female	8.7	1.8	195	8.1	1.5	189	7.7	1.5	197	7.3	1.8	202	6.6	1.8	24	7.9	1.8	807
Total	10.0	2.3	367	9.6	2.2	405	8.9	2.0	424	8.3	2.0	402	7.9	2.0	59	9.1	2.2	1657

Thickness of subcutaneous fat at thigh (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	6.3	1.9	171	6.0	1.9	216	5.6	1.9	225	5.5	1.8	200	5.7	1.8	35	5.8	1.9	847
Female	10.5	2.7	195	10.0	2.7	189	8.8	2.6	197	8.3	3.1	202	7.2	2.3	24	9.3	2.9	807
Total	8.5	3.2	366	7.9	3.1	405	7.1	2.8	422	6.9	2.9	402	6.3	2.1	59	7.5	3.0	1654

Thickness of musculus rectus femoris at thigh (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	32.6	5.7	171	30.4	5.9	216	28.9	6.1	225	24.9	5.8	200	23.7	6.6	35	28.9	6.6	847
Female	29.0	6.6	195	26.8	5.7	189	25.1	5.3	197	21.7	5.3	202	19.7	5.5	24	25.4	6.4	807
Total	30.7	6.4	366	28.7	6.1	405	27.2	6.0	422	23.3	5.7	402	22.1	6.4	59	27.2	6.7	1654

Thickness of subcutaneous fat at anterior calf (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	2.4	0.8	172	2.4	0.8	215	2.2	0.7	226	2.1	0.7	200	2.3	0.8	35	2.3	0.8	848
Female	3.7	1.4	195	3.4	1.4	189	3.1	1.3	197	3.1	1.2	202	2.5	1.1	24	3.3	1.3	807
Total	3.1	1.3	367	2.9	1.2	404	2.6	1.1	423	2.6	1.1	402	2.4	0.9	59	2.8	1.2	1655

Thickness of musculus tibialis anterior (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	26.8	3.0	172	26.6	3.2	216	25.4	3.3	226	23.8	3.0	200	23.7	3.8	35	25.5	3.4	849
Female	22.5	2.7	195	22.1	2.6	189	22.2	2.6	197	21.1	3.0	202	20.4	2.9	24	21.9	2.8	807
Total	24.5	3.6	367	24.5	3.7	405	23.9	3.4	423	22.4	3.2	402	22.3	3.8	59	23.8	3.6	1656

Thickness of subcutaneous fat at upper-arm (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	6.0	1.9	172	5.9	1.9	216	5.4	1.7	226	5.4	1.7	200	5.6	1.4	35	5.7	1.8	849
Female	9.8	2.8	195	9.9	2.8	189	9.7	2.5	197	9.2	2.6	202	8.3	2.2	24	9.6	2.7	807
Total	8.1	3.1	367	7.8	3.1	405	7.4	3.0	423	7.3	2.9	402	6.7	2.2	59	7.6	3.0	1656

Thickness of musculus triceps brachi (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	24.8	4.9	172	24.0	5.2	216	22.5	4.9	225	20.3	5.0	200	20.2	5.7	35	22.7	5.3	848
Female	19.6	5.1	195	19.9	4.0	189	19.7	4.6	197	18.6	4.9	202	15.4	3.4	24	19.3	4.7	807
Total	22.0	5.6	367	22.1	5.1	405	21.2	5.0	422	19.5	5.0	402	18.2	5.4	59	21.1	5.3	1655

Thickness of subcutaneous fat at subscapula (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	8.5	2.7	172	8.1	2.8	216	7.6	2.6	226	7.2	2.5	200	7.2	2.7	35	7.8	2.7	849
Female	9.7	4.8	195	10.0	3.9	188	9.9	3.6	197	9.5	3.8	202	7.4	3.2	24	9.7	4.0	806
Total	9.1	4.0	367	9.0	3.5	404	8.7	3.3	423	8.4	3.4	402	7.3	2.9	59	8.7	3.5	1655

Thickness of musculus latissimus dorsi at subscapula (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	5.7	1.6	172	5.0	1.4	216	4.9	1.5	226	4.7	1.6	200	4.5	1.5	35	5.0	1.6	849
Female	4.2	1.4	195	4.2	1.2	188	4.2	1.2	197	4.3	1.4	202	3.9	1.2	24	4.2	1.3	806
Total	4.9	1.7	367	4.7	1.4	404	4.6	1.4	423	4.5	1.5	402	4.2	1.4	59	4.6	1.5	1655

Thickness of subcutaneous fat at posterior mid-thigh (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	5.7	1.9	172	5.3	1.7	216	5.2	1.8	226	5.0	1.6	200	5.3	1.5	35	5.3	1.8	849
Female	9.6	3.4	195	8.8	3.2	189	8.0	3.3	197	7.7	3.6	202	7.4	3.1	24	8.5	3.4	807
Total	7.8	3.4	367	7.0	3.1	405	6.5	3.0	423	6.4	3.1	402	6.1	2.5	59	6.8	3.1	1656

Thickness of subcutaneous fat at posterior calf (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	4.5	1.4	172	4.3	1.4	216	3.9	1.2	226	3.9	1.3	200	4.1	1.3	35	4.1	1.3	849
Female	6.8	1.6	195	6.4	1.9	189	5.8	2.1	197	5.4	1.9	201	5.0	2.1	24	6.1	2.0	806
Total	5.7	1.9	367	5.3	1.9	405	4.8	1.9	423	4.7	1.8	401	4.4	1.7	59	5.1	1.9	1655

Thickness of musculus gastrocnemius and soleus (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	59.3	5.9	172	57.0	5.9	215	55.5	6.2	226	52.3	6.2	200	51.8	7.4	35	55.8	6.6	848
Female	51.9	6.3	195	50.5	5.6	188	50.0	5.6	197	48.0	5.6	200	46.9	5.7	24	50.0	5.9	804
Total	55.4	7.1	367	54.0	6.6	403	52.9	6.5	423	50.2	6.3	400	49.8	7.1	59	53.0	6.9	1652

4) Abdominal fat distribution

Intra-abdominal fat area at umbilicus by CT (cm²)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	76.2	34.9	171	89.2	45.4	214	98.5	48.2	226	91.2	50.8	200	93.1	61.8	35	89.7	46.9	846
Female	38.0	25.9	194	60.3	37.8	188	66.7	34.9	196	81.0	41.8	201	73.4	41.7	24	62.0	38.9	803
Total	55.9	35.9	365	75.7	44.4	402	83.7	45.4	422	86.1	46.7	401	85.1	55.0	59	76.2	45.4	1649

Subcutaneous fat area at umbilicus by CT (cm²)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	119.8	51.9	171	117.7	49.2	214	116.0	47.1	226	106.7	47.2	200	105.8	44.9	35	114.6	48.7	846
Female	145.8	73.1	194	168.3	65.7	188	171.0	61.9	196	165.7	69.7	201	125.0	50.9	24	161.6	68.2	803
Total	133.6	65.3	365	141.3	62.8	402	141.6	60.9	422	136.3	66.4	401	113.6	48.0	59	137.5	63.5	1649

Waist circumference at umbilicus by CT (cm)

	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	85.3	7.8	170	86.3	8.1	215	86.5	8.1	226	85.1	9.2	200	84.7	10.1	35	85.8	8.4	846
Female	80.7	9.2	194	85.1	9.1	188	86.3	8.8	196	87.2	10.4	201	82.1	9.6	24	84.8	9.7	803
Total	82.9	8.9	364	85.7	8.6	403	86.4	8.4	422	86.1	9.9	401	83.6	9.9	59	85.3	9.1	1649

5) Resting metabolic profiles

Resting energy expenditure (kcal/24 h)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	1458.2	205.2	166	1431.1	222.2	199	1330.9	217.8	219	1240.9	252.8	178	1139.9	184.1	32	1354.8	241.5	794
Female	1149.0	178.7	190	1122.2	187.4	178	1088.0	154.3	188	1070.7	185.6	187	979.2	141.7	21	1103.9	179.3	764
Total	1293.2	245.8	356	1285.2	257.6	377	1218.7	226.1	407	1153.7	236.5	365	1076.2	185.0	53	1231.8	247.4	1558

Oxygen intake on resting (l/min)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.21	0.03	166	0.20	0.03	198	0.19	0.03	219	0.17	0.04	178	0.16	0.03	32	0.19	0.04	793
Female	0.16	0.03	190	0.16	0.03	178	0.15	0.02	188	0.15	0.03	187	0.14	0.02	21	0.16	0.03	764
Total	0.18	0.04	356	0.18	0.04	376	0.17	0.03	407	0.16	0.03	365	0.15	0.03	53	0.17	0.04	1557

Carbon dioxide excretion on resting (l/min)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.18	0.03	166	0.18	0.03	198	0.17	0.03	219	0.16	0.03	178	0.14	0.02	32	0.17	0.03	793
Female	0.14	0.02	190	0.14	0.02	178	0.14	0.02	188	0.13	0.02	187	0.12	0.02	21	0.14	0.02	764
Total	0.16	0.03	356	0.16	0.03	376	0.15	0.03	407	0.14	0.03	365	0.14	0.02	53	0.15	0.03	1557

Respiratory exchange ratio on resting

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N									
Male	0.89	0.08	166	0.89	0.07	199	0.90	0.08	219	0.90	0.07	178	0.90	0.08	32	0.90	0.08	794
Female	0.87	0.07	190	0.88	0.08	178	0.89	0.08	188	0.87	0.07	187	0.88	0.10	21	0.88	0.07	764
Total	0.88	0.07	356	0.88	0.08	377	0.90	0.08	407	0.88	0.07	365	0.90	0.09	53	0.89	0.08	1558

XII. Head MRI Measurements