

MCHC (%)

Platelet count (x10000/ μ l)

1) Blood chemistry

Total protein (g/dl)

	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	7.3	0.4	185	7.2	0.4	155	7.3	0.4	162	7.4	0.5	170	7.3	0.5	52	7.3	0.4	724
Female	7.3	0.4	195	7.4	0.4	148	7.3	0.4	159	7.4	0.5	167	7.4	0.6	53	7.4	0.4	722
Total	7.3	0.4	380	7.3	0.4	303	7.3	0.4	321	7.4	0.5	337	7.4	0.5	105	7.3	0.4	1446

Triglyceride (mg/dl)

	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	127.5	83.0	183	135.6	87.3	153	124.1	72.4	158	118.0	57.2	160	95.3	43.9	49	124.1	74.7	703
Female	77.2	39.6	191	93.5	48.8	148	110.7	54.5	156	114.4	67.4	162	106.2	39.3	51	98.6	54.2	708
Total	101.8	69.3	374	114.9	74.0	301	117.5	64.4	314	116.2	62.5	322	100.8	41.8	100	111.3	66.4	1411

Total cholesterol (mg/dl)

	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	208.7	34.4	185	211.6	31.3	155	205.3	32.4	162	204.9	33.3	170	195.3	34.2	52	206.7	33.2	724
Female	203.5	28.4	195	224.3	33.7	148	226.8	32.0	159	221.0	28.4	167	213.1	32.9	53	217.7	32.0	722
Total	206.1	31.5	380	217.8	33.1	303	215.9	33.9	321	212.9	32.0	337	204.3	34.6	105	212.2	33.0	1446

Uric acid (mg/dl)

	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	6.0	1.2	185	5.9	1.2	155	5.7	1.4	162	6.0	1.2	170	5.7	1.4	52	5.9	1.3	724
Female	4.1	0.9	195	4.5	1.1	148	4.6	1.0	159	4.8	1.1	167	5.0	1.3	53	4.5	1.1	722
Total	5.0	1.5	380	5.2	1.4	303	5.1	1.3	321	5.4	1.3	337	5.4	1.4	105	5.2	1.4	1446

Creatinine (mg/dl)

	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	0.9	0.4	185	0.8	0.1	155	0.8	0.2	162	0.9	0.2	170	0.8	0.2	52	0.8	0.3	724
Female	0.6	0.1	195	0.6	0.1	148	0.6	0.5	159	0.6	0.1	167	0.7	0.1	53	0.6	0.3	722
Total	0.7	0.3	380	0.7	0.1	303	0.7	0.4	321	0.8	0.2	337	0.8	0.2	105	0.7	0.3	1446

Calcium (mg/dl)

	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	9.3	0.3	185	9.3	0.3	155	9.2	0.4	162	9.2	0.4	170	9.1	0.4	52	9.2	0.4	724
Female	9.1	0.3	195	9.4	0.4	148	9.3	0.4	159	9.3	0.3	167	9.2	0.3	53	9.2	0.4	722
Total	9.2	0.4	380	9.3	0.4	303	9.2	0.4	321	9.2	0.4	337	9.1	0.4	105	9.2	0.4	1446

Glutamate oxaloacetate transaminase, GOT (IU/l)

	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	23.6	9.6	185	23.4	9.5	155	22.3	6.3	162	25.3	9.5	170	24.8	6.9	52	23.8	8.8	724
Female	18.9	6.3	195	21.9	9.7	148	24.3	11.2	159	23.9	8.0	167	24.8	14.4	53	22.3	9.6	722
Total	21.2	8.4	380	22.7	9.6	303	23.3	9.1	321	24.6	8.8	337	24.8	11.3	105	23.0	9.2	1446

Glutamate pyruvate transaminase, GPT (IU/l)

	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	29.6	19.2	185	26.6	18.9	155	21.5	10.1	162	22.4	13.3	170	17.7	7.9	52	24.6	15.9	724
Female	16.9	11.9	195	20.3	13.9	148	21.6	12.9	159	18.9	9.2	167	17.0	12.8	53	19.1	12.2	722
Total	23.1	17.1	380	23.6	16.9	303	21.5	11.5	321	20.7	11.6	337	17.3	10.6	105	21.9	14.4	1446

Phosphorus (mg/dl)

	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	3.3	0.4	185	3.2	0.4	155	3.1	0.4	162	3.2	0.4	170	3.1	0.4	52	3.2	0.4	724
Female	3.5	0.4	195	3.8	0.4	148	3.7	0.4	159	3.7	0.4	167	3.6	0.3	53	3.6	0.4	722
Total	3.4	0.4	380	3.5	0.5	303	3.4	0.5	321	3.5	0.5	337	3.3	0.4	105	3.4	0.5	1446

Gamma-glutamyltransferase (IU/l)

	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	45.5	39.2	185	55.2	57.9	155	48.2	45.3	162	39.5	32.0	170	28.8	20.1	52	45.6	43.4	724
Female	20.4	13.9	195	29.1	31.9	148	29.4	24.9	159	23.3	19.1	167	24.0	20.5	53	25.1	22.9	722
Total	32.6	31.7	380	42.4	48.7	303	38.9	37.8	321	31.5	27.6	337	26.4	20.3	105	35.3	36.1	1446

Cholinesterase (IU/l)

	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	368.1	73.7	185	362.9	82.8	155	346.1	92.4	162	322.9	89.6	170	302.9	71.9	52	346.8	86.2	724
Female	313.4	67.0	195	347.4	78.3	148	357.1	115.2	159	345.3	77.3	167	309.8	56.9	53	337.1	85.5	722
Total	340.1	75.4	380	355.3	80.8	303	351.6	104.3	321	334.0	84.4	337	306.4	64.6	105	341.9	85.9	1446

Iron ($\mu\text{g}/\text{dl}$)

	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	126.2	44.3	185	117.9	38.5	155	109.5	36.2	162	115.8	37.8	170	121.1	34.5	52	117.9	39.5	724
Female	106.7	52.0	195	104.8	37.1	148	109.1	32.3	159	100.2	29.8	167	90.9	27.6	53	104.2	39.0	722
Total	116.2	49.3	380	111.5	38.4	303	109.3	34.3	321	108.1	34.9	337	105.8	34.5	105	111.0	39.8	1446

Insulin ($\mu\text{U}/\text{ml}$)

	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	7.2	4.6	183	6.3	3.6	153	6.2	10.7	158	6.3	3.8	160	5.2	3.7	49	6.4	6.2	703
Female	6.6	4.5	191	5.9	3.3	148	7.6	12.0	156	7.0	3.8	162	6.0	3.3	51	6.7	6.6	708
Total	6.9	4.6	374	6.1	3.5	301	6.9	11.4	314	6.6	3.8	322	5.6	3.5	100	6.6	6.4	1411

Sialic acid (mg/dl)

	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	58.4	6.2	185	59.1	6.2	155	61.5	7.8	162	62.4	8.8	170	60.8	6.1	52	60.4	7.4	724
Female	57.1	6.8	195	60.3	7.2	148	60.5	7.5	159	63.7	7.4	167	63.6	7.2	53	60.5	7.6	722
Total	57.8	6.5	380	59.7	6.7	303	61.0	7.7	321	63.0	8.1	337	62.2	6.8	105	60.4	7.5	1446

HDL-cholesterol (mg/dl)

	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	56.4	13.1	185	57.5	15.1	155	56.5	14.8	162	54.9	14.7	170	56.4	16.4	52	56.3	14.6	724
Female	69.4	15.0	195	69.6	15.4	148	64.4	13.7	159	62.6	14.9	167	60.6	17.9	53	66.1	15.3	722
Total	63.1	15.5	380	63.4	16.4	303	60.4	14.8	321	58.7	15.3	337	58.5	17.2	105	61.2	15.7	1446

Fasting glucose (mg/dl)

	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	97.3	11.3	183	102.8	15.8	154	107.5	21.8	158	104.3	14.7	160	106.0	21.5	49	103.0	17.0	704
Female	94.1	14.3	191	95.2	10.2	148	101.6	22.3	156	102.6	15.7	162	100.6	15.1	51	98.4	16.5	708
Total	95.7	13.0	374	99.1	13.9	302	104.6	22.2	314	103.4	15.2	322	103.2	18.6	100	100.7	16.9	1412

Hemoglobin A1c (%)

	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	5.1	0.5	185	5.3	0.6	156	5.6	0.8	162	5.5	0.6	170	5.6	0.9	52	5.4	0.7	725
Female	5.1	0.6	195	5.3	0.4	148	5.5	0.8	159	5.5	0.5	167	5.4	0.6	53	5.3	0.6	722
Total	5.1	0.6	380	5.3	0.5	304	5.5	0.8	321	5.5	0.6	337	5.5	0.8	105	5.4	0.6	1447

Albumin (mg/dl)

	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	4878.6	354.3	185	4666.3	341.0	155	4559.4	342.3	162	4578.0	373.3	170	4396.2	376.1	52	4656.5	382.7	724
Female	4674.8	335.2	195	4594.3	328.7	148	4544.7	324.5	159	4521.8	338.1	167	4371.3	383.8	53	4572.0	344.9	722
Total	4774.0	359.0	380	4631.1	336.4	303	4552.1	333.2	321	4550.1	356.9	337	4383.6	378.4	105	4614.3	366.6	1446

High sensitive CRP (ng/ml)

	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	1029.2	3370.5	185	778.9	1225.6	155	1811.2	5605.8	162	2319.8	15926	170	1130.3	1634.9	52	1460.9	8368.9	724
Female	749.6	3044.2	195	1225.2	3550.3	148	1063.1	3276.8	159	1428.6	2987.0	167	868.9	887.2	53	1081.9	3097.2	722
Total	885.7	3206.0	380	996.9	2636.5	303	1440.6	4610.0	321	1878.2	11497	337	998.4	1312.1	105	1271.7	6313.9	1446

Teststerone (ng/ml)

	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	13.3	3.0	185	12.2	2.9	155	10.6	2.9	162	9.3	3.0	170	7.6	3.1	52	11.1	3.5	724
Female	.	.	0	.	.	0	.	.	0	.	.	0	.	.	0	.	.	0
Total	13.3	3.0	185	12.2	2.9	155	10.6	2.9	162	9.3	3.0	170	7.6	3.1	52	11.1	3.5	724

Free teststerone (pg/ml)

	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	5.3	1.5	185	5.4	1.4	155	5.1	1.6	162	5.0	1.9	170	4.8	1.8	52	5.2	1.6	724
Female	.	.	0	.	.	0	.	.	0	.	.	0	.	.	0	.	.	0
Total	5.3	1.5	185	5.4	1.4	155	5.1	1.6	162	5.0	1.9	170	4.8	1.8	52	5.2	1.6	724

2) Complete blood cell count

White blood cell count (μ l)

	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	6081.1	2290.2	185	5857.7	1386.7	156	5969.1	1597.7	162	5915.3	1501.7	170	5696.2	1490.8	52	5941.5	1733.9	725
Female	5395.4	1427.9	195	5000.7	1267.4	148	5169.2	1269.7	159	5506.6	1488.3	167	5662.3	1223.1	53	5310.0	1375.2	722
Total	5729.2	1925.6	380	5440.5	1395.3	304	5572.9	1496.9	321	5712.8	1506.8	337	5679.0	1355.7	105	5626.4	1596.3	1447

Red blood cell count ($\times 10000/\mu$ l)

	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	512.0	37.2	185	496.4	39.2	156	489.0	45.7	162	476.5	51.7	170	449.4	50.3	52	490.7	47.3	725
Female	450.5	38.5	195	455.4	32.3	148	453.9	32.8	159	442.1	39.1	167	428.9	45.0	53	448.7	37.4	722
Total	480.4	48.8	380	476.4	41.4	304	471.6	43.5	321	459.4	48.9	337	439.0	48.6	105	469.7	47.6	1447

Hemoglobin (g/dl)

	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	16.1	1.1	185	15.8	1.1	156	15.6	1.3	162	15.3	1.5	170	14.5	1.5	52	15.6	1.4	725
Female	13.5	1.4	195	13.9	1.3	148	14.1	1.0	159	13.8	1.2	167	13.1	1.6	53	13.7	1.3	722
Total	14.8	1.8	380	14.9	1.6	304	14.8	1.4	321	14.5	1.6	337	13.8	1.7	105	14.7	1.6	1447

Hematocrit (%)

	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	47.7	3.1	185	47.2	3.2	156	46.6	3.7	162	45.5	4.3	170	43.6	4.5	52	46.6	3.9	725
Female	41.0	3.7	195	41.9	3.6	148	42.6	2.9	159	41.8	3.5	167	40.2	4.5	53	41.7	3.6	722
Total	44.3	4.8	380	44.6	4.3	304	44.6	3.9	321	43.7	4.4	337	41.8	4.8	105	44.1	4.5	1447

MCV (fl)

	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	93.4	4.0	185	95.3	4.7	156	95.5	4.5	162	95.9	5.2	170	97.2	5.0	52	95.1	4.8	725
Female	91.2	6.1	195	92.1	5.5	148	93.9	3.1	159	94.6	3.9	167	93.7	5.4	53	93.0	5.1	722
Total	92.3	5.3	380	93.8	5.4	304	94.7	3.9	321	95.2	4.6	337	95.4	5.5	105	94.1	5.0	1447

MCH (pg)

	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	31.5	1.4	185	32.0	1.6	156	31.9	1.7	162	32.1	2.0	170	32.4	1.8	52	31.9	1.7	725
Female	30.0	2.6	195	30.5	2.3	148	31.0	1.3	159	31.2	1.3	167	30.6	2.3	53	30.6	2.0	722
Total	30.8	2.2	380	31.2	2.1	304	31.5	1.6	321	31.7	1.8	337	31.5	2.2	105	31.3	2.0	1447

MCHC (%)

	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	33.8	0.9	185	33.5	0.9	156	33.4	1.0	162	33.5	0.9	170	33.3	1.0	52	33.5	0.9	725
Female	32.9	1.1	195	33.0	1.1	148	33.0	0.8	159	33.0	0.9	167	32.7	1.0	53	32.9	1.0	722
Total	33.3	1.1	380	33.3	1.1	304	33.2	0.9	321	33.3	0.9	337	33.0	1.0	105	33.2	1.0	1447

Platelet count (x10000/ μ l)

	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	21.7	4.4	185	21.3	5.0	154	19.9	5.3	160	19.2	5.4	168	17.2	5.0	52	20.3	5.2	719
Female	24.0	7.8	192	20.9	5.2	147	20.2	4.9	156	20.5	5.1	163	21.1	5.9	53	21.5	6.2	711
Total	22.9	6.4	377	21.1	5.1	301	20.1	5.1	316	19.9	5.3	331	19.1	5.8	105	20.9	5.7	1430

VI. Psychological Examinations

VI. Psychological Examinations

1) Depression Scales

1. The Center for Epidemiologic Studies Depression Scale (CES-D)

The Japanese version of the scale comprises 20 items with 4 options, the same as the original. This scale consists of 4 subscales as follows: somatic and retarded activity, depressed affect, positive affect, and interpersonal relations. Higher scores indicate higher depressive symptoms. A person with total score at and above 16 is supposed to have clinically significant depressive tendency.

CES-D: total score of 4 subscales (20 items. possible range 0-60)

CES-D subscale 1: somatic and retarded activity (7 items. possible range 0-21)

CES-D subscale 2: depressed affect (7 items. possible range 0-21)

CES-D subscale 3: positive affect (4 items. possible range 0-12)

CES-D subscale 4: interpersonal relations (2 items. possible range 0-6)

CES-D: parameter of distribution using cutoff score (cutoff score=15/16)

2) Subjective Well-being

1. Life Satisfaction Index-K (LSI-K)

The LSI-K has 9 items with 2- or 3-point response format to measure overall subjective well-being. This scale also consists of 3 subscales include: satisfaction with life as a whole, psychological stability, and evaluation of own aging. Response to 3-point scale is dichotomized when calculating total score, so that the possible total score range is 0 to 9. Higher score indicates higher life satisfaction.

LSI-K: total score of 3 subscales (9 items. possible range 0-9)

LSI-K subscale 1: satisfaction with life as a whole (4 items. possible range 0-4)

LSI-K subscale 2: psychological stability (3 items. possible range 0-3)

LSI-K subscale 3: evaluation of own aging (2 items. possible range 0-2)

3) Personality

1. The Rosenberg Self-Esteem Scale

This scale comprises 10 items (4 options) to measure self-regard, an evaluation of one's worthiness. Higher score indicates higher self-esteem.

Rosenberg self-esteem scale: total score of 10 items (possible range 10-40)

2. Neuroticism-Extraversion-Openness Five-Factor Inventory (NEO-FFI)

NEO-FFI is an abbreviated version of NEO-PI-R, which was designed to provide a general description of normal personality. This scale is comprised of 60 items with 5-point options. The five domains (factors) measured by NEO-FFI are as follows: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.

NEO-FFI subscale 1: Neuroticism (12 items. possible range 0-48)

NEO-FFI subscale 2: Extraversion (12 items. possible range 0-48)

NEO-FFI subscale 3: Openness to Experience (12 items. possible range 0-48)

NEO-FFI subscale 4: Agreeableness (12 items. possible range 0-48)

NEO-FFI subscale 5: Conscientiousness (12 items. possible range 0-48)

3. The Scale of Attitude toward Death (ATD)

Multidimensional attitudes toward death are measured using 31-item scale (5 options). Five subscales and extra two indices of the scale are the following: fear of death, intention to live out own life, belief in existence of afterlife, meaning of death for life, approval of death with dignity, experience of thinking over death, and frequency of thinking about death. Higher scores indicate stronger tendency of each subscale or index.

ATD subscale 1: Fear of death (9 items. possible range 9-45)

ATD subscale 2: Intention to live out own life (5 items. possible range 5-25)

ATD subscale 3: Belief in existence of afterlife (4 items. possible range 4-20)

ATD subscale 4: Meaning of death for life (5 items. possible range 5-25)

ATD subscale 5: Approval of death with dignity (4 items. possible range 4-20)

ATD item 29: Experience of thinking over death (1 item. possible range 1-5)

ATD item 30: Frequency of thinking about death (1 item. possible range 1-5)

4) Stress-Related Factors

1. Stress Checklist

Sixty-one items are picked up from some traditional checklists and scales to estimate stressful life-events and daily hassles. Participants are asked to check off the items they confronted in recent past (between 4th and 5th examinations in the NLS-LSA). Total number of experienced events is calculated by summing up the responses to the list.

Total number of life events experienced between the surveys (possible range 0-61)

5) ADL Scales

1. The Tokyo Metropolitan Institute of Gerontology (TMIG) Index of Competence

This scale comprises thirteen items to measure higher physical and social functions such as instrumental activities of daily living (IADL). Each item has Yes (1)/No (0) response options. Higher score indicates higher competence level.

TMIG index of competence: total score of 13 items (possible range 0-13)

2. The Katz Index

This scale generates the index of basic ADLs. The index permits ranking of individuals according to adequacy of performance in six functions (bathing, dressing, going to toilet, transferring, continence, and feeding). Adequacy is expressed as a grade (A to G). Level A means overall independence in the functions, and the opposite pole is level G, which means general dependence in ADL.

Katz index

6) Intelligence and Cognitive Function Scales

1. Wechsler Adult Intelligence Scale-Revised Short Forms (WAIS-R-SF)

This short form of WAIS-R provides cost-effective and useful estimates of intelligence particularly for elderly participants since their attention and motivation could diminish easily if testing becomes prolonged. WAIS-R-SF has the following four subtests: information, similarities, picture completion, and

digit symbol. Estimated intelligence quotient (EIQ) is derived from all four subtests. Intelligence level of individuals are ranked according to EIQ scores as low ($EIQ < 80$), middle ($80 \leq EIQ < 120$), and high ($120 \leq EIQ$).

WAIS-R-SF: estimated intelligence quotient (EIQ) with four-subtest full scale

WAIS-R-SF: parameter of distribution by EIQ level

WAIS-R-SF subtest 1: information (29 items. possible range 0-29)

WAIS-R-SF subtest 2: similarities (14 items. possible range 0-28)

WAIS-R-SF subtest 3: picture completion (21 items. possible range 0-21)

WAIS-R-SF subtest 4: digit symbol (possible range 0-93)

2. Short-term Memory Function

We also assessed the WAIS-R digit span test (forwards and backwards) for estimating participants' Short-term memory function.

Short-term memory function: WAIS-R digit span (possible range 0-28)

3. Mini Mental State Examination (MMSE)

MMSE is a brief, easily-scored test of several cognitive functions. This scale comprises questions concerning orientation in place and time, immediate and delayed recall of three words, attention and calculation, language and praxis, and visual construction. Cognitive impaired person might fall in the total score of 23 or less in the scale. Only participants over 60 years old administer this scale because of the characteristic of the scale as a screening test for dementia.

MMSE: total score of 30 items (possible range 0-30. less than 60 years older unperformed)

MMSE: parameter of distribution using cutoff score (cutoff score=23/24)

7) Other measures

1. Social and Domestic Activities

To comprehend participants' social and psychological characteristics, the NLS-LSA 5th Wave asked participants to report the extent of the following unpaid activities they were doing in their home and community.

Social activities

Learning activities

Roles in family

Leisure activities

Reading newspapers

Reading books

Writing

Solving quizzes or crossword puzzles

Playing board games or cards

Participating in organized group discussion

Playing musical instruments

Creative activity

Art appreciation

Using computers for communication

Playing individual sports

Participating in team games

Performing exercise

Swimming

Walking

Jogging

Hiking or climbing

Fishing

Gardening

Traveling

2. Work commitment scale

This scale comprises 16 items (4 options) to measure commitment to own work. Higher score indicates higher commitment with own work. Only participants who have job (either full employment or part time

employment) administer this scale.

Work commitment scale: total score of 16 items (possible range 16-64)

8) Background examinations

Present life worth living

State of employment

Present job

Period of full employment (years)

Years of education

Marital status

State of habitation

Sum of family annual income

Level of satisfaction in annual income

1) Depression Scales

1. The Center for Epidemiologic Studies Depression Scale (CES-D)

The Japanese version of the scale comprises 20 items with 4 options, the same as the original. This scale consists of 4 subscales as follows: somatic and retarded activity, depressed affect, positive affect, and interpersonal relations. Higher scores indicate higher depressive symptoms. A person with total score at and above 16 is supposed to have clinically significant depressive tendency.

CES-D : total score of 4 subscales (20 items, possible range 0-60)

	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	7.0	5.8	183	7.3	8.0	155	6.4	6.7	158	8.0	7.4	166	8.8	7.1	51	7.3	7.0	713
Female	7.8	6.8	192	8.1	8.0	147	7.4	7.0	156	9.5	8.1	161	10.7	8.2	51	8.3	7.6	707
Total	7.4	6.3	375	7.7	8.0	302	6.9	6.8	314	8.7	7.8	327	9.7	7.7	102	7.8	7.3	1420

CES-D subscale 1: somatic and retarded activity (7 items, possible range 0-21)

	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	2.1	2.4	185	2.2	3.0	156	2.2	2.6	162	3.1	3.3	169	3.3	2.7	51	2.5	2.9	723
Female	2.4	2.6	195	2.9	3.3	147	2.6	2.9	158	3.6	3.4	163	4.2	3.5	53	2.9	3.1	716
Total	2.3	2.5	380	2.5	3.2	303	2.4	2.8	320	3.3	3.3	332	3.8	3.2	104	2.7	3.0	1439

CES-D subscale 2: depressed affect (7 items, possible range 0-21)

	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	1.7	2.0	183	1.8	2.8	155	1.4	2.1	159	1.8	2.4	167	2.2	2.4	51	1.7	2.3	715
Female	1.9	2.4	193	2.1	2.8	148	1.9	2.7	157	2.5	3.1	165	2.9	3.6	53	2.1	2.8	716
Total	1.8	2.2	376	2.0	2.8	303	1.6	2.4	316	2.1	2.8	332	2.5	3.1	104	1.9	2.6	1431

CES-D subscale 3: positive affect (4 items, possible range 0-12)

	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	3.0	2.4	185	2.9	2.8	156	2.7	2.7	161	2.8	2.6	170	2.9	2.7	51	2.8	2.6	723
Female	3.2	2.7	194	2.9	2.7	148	2.8	2.5	158	3.3	2.8	164	3.4	2.5	53	3.1	2.7	717
Total	3.1	2.5	379	2.9	2.7	304	2.7	2.6	319	3.0	2.7	334	3.2	2.6	104	3.0	2.7	1440

CES-D subscale 4: interpersonal relations (2 items, possible range 0-6)

	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	0.2	0.6	185	0.3	0.8	156	0.2	0.6	162	0.4	0.9	169	0.4	0.8	51	0.3	0.7	723
Female	0.3	0.8	195	0.2	0.6	147	0.2	0.5	159	0.4	0.9	166	0.4	0.8	51	0.3	0.7	718
Total	0.3	0.7	380	0.3	0.7	303	0.2	0.6	321	0.4	0.9	335	0.4	0.8	102	0.3	0.7	1441

CES-D: parameter of distribution using cutoff score (cutoff score=15/16)

		40-49yr		50-59yr		60-69yr		70-79yr		80yr-		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Under score of 16	Male	166	90.7	137	88.4	139	88.0	142	85.5	43	84.3	627	87.9
	Female	164	85.4	129	87.8	137	87.8	127	78.9	39	76.5	596	84.3
	Total	330	88.0	266	88.1	276	87.9	269	82.3	82	80.4	1223	86.1
At and above score of 16	Male	17	9.3	18	11.6	19	12.0	24	14.5	8	15.7	86	12.1
	Female	28	14.6	18	12.2	19	12.2	34	21.1	12	23.5	111	15.7
	Total	45	12.0	36	11.9	38	12.1	58	17.7	20	19.6	197	13.9

2) Subjective Well-being

1. Life Satisfaction Index-K (LSI-K)

The LSI-K has 9 items with 2- or 3-point response format to measure overall subjective well-being. This scale also consists of 3 subscales include: satisfaction with life as a whole, psychological stability, and evaluation of own aging. Response to 3-point scale is dichotomized when calculating total score, so that the possible total score range is 0 to 9. Higher score indicates higher life satisfaction.

LSI-K: total score of 3 subscales (9 items. possible range 0-9)

	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	4.9	1.9	184	5.0	1.9	156	5.5	2.1	161	4.9	2.2	168	4.1	2.2	51	5.0	2.0	720
Female	5.2	2.0	195	5.1	2.0	146	5.4	2.1	159	4.6	2.2	165	4.0	2.5	53	5.0	2.2	718
Total	5.1	2.0	379	5.0	1.9	302	5.5	2.1	320	4.7	2.2	333	4.0	2.3	104	5.0	2.1	1438

LSI-K subscale 1: satisfaction with life as a whole (4 items. possible range 0-4)

	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	1.5	1.1	184	1.8	1.1	156	2.1	1.2	161	1.9	1.3	168	1.5	1.3	51	1.8	1.2	720
Female	1.7	1.2	195	1.8	1.3	146	2.2	1.3	159	2.0	1.2	165	1.9	1.4	53	1.9	1.3	718
Total	1.6	1.2	379	1.8	1.2	302	2.1	1.2	320	1.9	1.2	333	1.7	1.4	104	1.9	1.2	1438

LSI-K subscale 2: psychological stability (3 items. possible range 0-3)

	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	1.8	0.9	185	1.6	0.9	156	1.9	0.9	161	1.8	1.0	169	1.7	0.9	51	1.8	0.9	722
Female	1.8	0.9	195	1.7	0.9	148	1.8	1.0	159	1.5	1.0	166	1.5	1.0	53	1.7	1.0	721
Total	1.8	0.9	380	1.6	0.9	304	1.8	0.9	320	1.6	1.0	335	1.6	1.0	104	1.7	1.0	1443

LSI-K subscale 3: evaluation of own aging (2 items. possible range 0-2)

	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	1.7	0.5	185	1.6	0.7	156	1.6	0.7	161	1.2	0.7	170	0.9	0.7	51	1.5	0.7	723
Female	1.6	0.6	195	1.6	0.6	148	1.5	0.7	159	1.1	0.8	166	0.6	0.7	53	1.4	0.7	721
Total	1.7	0.6	380	1.6	0.6	304	1.5	0.7	320	1.2	0.8	336	0.8	0.7	104	1.4	0.7	1444

3) Personality

1. The Rosenberg Self-Esteem Scale

This scale comprises 10 items (4 options) to measure self-regard, an evaluation of one's worthiness. Higher score indicates higher self-esteem

Rosenberg self-esteem scale: total score of 10 items (possible range 10-40)

	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	29.2	3.7	185	29.3	4.1	156	30.4	4.5	161	29.5	4.6	169	28.2	4.8	51	29.5	4.3	722
Female	27.9	5.1	195	28.1	4.5	148	29.0	4.4	159	28.0	4.7	164	27.2	4.4	53	28.2	4.7	719
Total	28.5	4.5	380	28.8	4.3	304	29.7	4.5	320	28.8	4.7	333	27.7	4.6	104	28.8	4.5	1441

2. Neuroticism-Extraversion-Openness Five-Factor Inventory (NEO-FFI)

NEO-FFI is an abbreviate version of NEO-PI-R, which was designed to provide a general description of normal personality. This scale is comprised of 60 items with 5-point options. The five domains (factors) measured by NEO-FFI are as follows: neuroticism, extraversion, openness to experience, agreeableness, and consciousness.

NEO-FFI subscale 1: Neuroticism (12 items, possible range 0-48)

	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	21.8	5.7	185	21.5	5.8	156	19.1	5.8	161	19.7	5.4	169	20.9	4.7	50	20.6	5.7	721
Female	22.8	6.9	193	22.3	6.6	148	20.7	5.8	158	20.9	6.3	164	21.0	6.2	52	21.7	6.5	715
Total	22.3	6.4	378	21.9	6.2	304	19.9	5.8	319	20.3	5.9	333	20.9	5.5	102	21.1	6.1	1436

NEO-FFI subscale 2: Extraversion (12 items, possible range 0-48)

	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	24.1	5.0	185	24.1	5.4	156	26.7	5.4	161	24.8	5.2	168	23.4	4.0	50	24.8	5.3	720
Female	25.3	6.4	193	24.4	6.0	148	26.3	5.2	158	25.7	5.5	165	25.4	4.9	52	25.4	5.7	716
Total	24.7	5.8	378	24.2	5.7	304	26.5	5.3	319	25.2	5.3	333	24.4	4.6	102	25.1	5.5	1436

NEO-FFI subscale 3: Openness to Experience (12 items, possible range 0-48)

	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	27.6	4.6	185	26.6	4.4	156	27.0	4.5	161	24.8	4.4	169	24.8	3.7	50	26.4	4.5	721
Female	27.2	4.9	193	27.2	4.2	148	26.6	4.3	159	25.6	4.1	164	24.2	4.5	51	26.5	4.5	715
Total	27.4	4.8	378	26.9	4.3	304	26.8	4.4	320	25.2	4.3	333	24.5	4.2	101	26.4	4.5	1436

NEO-FFI subscale 4: Agreeableness (12 items, possible range 0-48)

	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	29.8	4.6	185	29.9	4.5	156	31.2	4.9	161	30.9	4.2	167	30.3	3.6	50	30.4	4.5	719
Female	32.2	5.0	193	32.0	5.4	148	32.8	4.9	159	33.5	4.4	164	33.0	4.8	51	32.7	4.9	715
Total	31.0	4.9	378	30.9	5.0	304	32.0	5.0	320	32.2	4.5	331	31.6	4.4	101	31.5	4.9	1434

NEO-FFI subscale 5: Conscientiousness (12 items, possible range 0-48)

	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	27.8	4.8	185	28.1	5.2	156	30.0	4.9	161	29.1	5.0	168	29.3	3.9	49	28.8	5.0	719
Female	26.9	5.3	193	28.0	5.7	148	29.1	5.0	158	29.3	4.6	164	28.5	5.0	51	28.3	5.2	714
Total	27.3	5.1	378	28.0	5.5	304	29.6	5.0	319	29.2	4.8	332	28.9	4.5	100	28.5	5.1	1433