

Behenic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	739.7	1749.6	133	765.2	1847.1	143	277.5	642.6	125	137.9	385.6	130	490.4	1373.5	531
Female	254.7	608.0	127	182.4	448.2	129	104.1	183.1	124	87.3	193.5	127	157.5	406.0	507
Total	502.8	1341.2	260	488.8	1402.7	272	191.2	480.3	249	112.9	306.6	257	327.8	1035.5	1038

Docosenoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	208.9	223.6	133	229.0	319.1	143	207.4	246.6	125	261.4	325.7	130	226.8	283.3	531
Female	205.1	246.0	127	236.3	252.2	129	182.5	225.6	124	158.8	160.4	127	195.9	225.3	507
Total	207.0	234.3	260	232.5	288.8	272	195.0	236.3	249	210.7	262.2	257	211.7	256.9	1038

Docosadienoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.0	0.3	133	0.0	0.0	143	0.0	0.3	125	0.0	0.0	130	0.0	0.2	531
Female	0.0	0.0	127	0.0	0.4	129	0.0	0.1	124	0.0	0.0	127	0.0	0.2	507
Total	0.0	0.2	260	0.0	0.3	272	0.0	0.2	249	0.0	0.0	257	0.0	0.2	1038

n-3 Docosapentaenoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	77.5	68.8	133	87.1	63.7	143	85.1	77.7	125	99.1	85.5	130	87.2	74.3	531
Female	60.0	51.2	127	83.4	73.6	129	76.9	57.9	124	69.0	76.1	127	72.3	66.0	507
Total	69.0	61.3	260	85.3	68.4	272	81.0	68.5	249	84.3	82.2	257	79.9	70.7	1038

n-6 Docosapentaenoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.7	3.4	133	2.2	4.4	143	3.3	6.9	125	3.0	5.3	130	2.5	5.2	531
Female	1.7	3.5	127	2.0	4.1	129	1.7	3.2	124	2.0	4.7	127	1.8	3.9	507
Total	1.7	3.4	260	2.1	4.3	272	2.5	5.5	249	2.5	5.0	257	2.2	4.6	1038

Docosahexaenoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	512.0	331.4	133	577.9	349.7	143	578.4	398.3	125	592.1	377.9	130	565.0	364.6	531
Female	421.3	263.4	127	542.2	353.8	129	491.1	287.5	124	438.0	392.8	127	473.3	331.3	507
Total	467.7	303.0	260	561.0	351.5	272	534.9	349.6	249	516.0	392.3	257	520.2	351.6	1038

Lignoceric acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	24.6	42.6	133	27.1	51.9	143	33.9	95.7	125	20.1	32.0	130	26.4	59.9	531
Female	15.4	24.9	127	26.6	52.1	129	23.6	58.0	124	15.3	28.8	127	20.2	43.5	507
Total	20.1	35.3	260	26.9	51.9	272	28.8	79.2	249	17.7	30.5	257	23.4	52.6	1038

Tetracosenoic acid (mg)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	40.5	33.8	133	47.8	36.0	143	48.4	40.2	125	50.6	39.4	130	46.8	37.4	531
Female	34.6	27.5	127	47.9	36.2	129	42.8	32.7	124	36.9	37.5	127	40.6	34.0	507
Total	37.6	31.0	260	47.8	36.0	272	45.6	36.7	249	43.8	39.0	257	43.8	35.9	1038

Alcohol (g)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.2	9.4	133	7.0	15.0	143	6.2	13.9	125	5.3	10.8	130	5.4	12.5	531
Female	1.1	4.8	127	0.5	1.5	129	0.6	1.8	124	0.3	1.0	127	0.7	2.7	507
Total	2.2	7.6	260	3.9	11.4	272	3.4	10.3	249	2.8	8.1	257	3.1	9.5	1038

V. Bone Analysis

V. Bone Analysis

1) Bone mineral density

1. Dual energy X-ray absorptiometry (DXA)

Whole body

Lumbar spine 2-4

Right and left femoral neck

Right and left trochanter region

Right and left Wards triangle

2. Peripheral quantitative computed tomography (pQCT)

D100: Cortical and trabecular bone density of ultradistal radius.

D50: Trabecular bone density over the core volume of ultradistal radius.

P100: Cortical bone density of proximal radius.

Bone mineral density

1. Dual energy X-ray absorptiometry (DXA) (Hologic QDR-4500)

Whole body (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.109	0.083	153	1.108	0.093	149	1.088	0.094	134	1.049	0.097	138	1.089	0.095	574
Female	1.093	0.095	145	1.015	0.115	135	0.894	0.075	138	0.866	0.076	132	0.969	0.130	550
Total	1.101	0.089	298	1.064	0.114	284	0.989	0.129	272	0.959	0.126	270	1.031	0.128	1124

Lumbar spine 2-4 (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.981	0.113	153	0.986	0.145	149	0.981	0.163	134	0.963	0.199	138	0.978	0.157	574
Female	1.016	0.139	145	0.898	0.150	135	0.787	0.124	138	0.758	0.152	132	0.868	0.175	550
Total	0.998	0.127	298	0.944	0.153	284	0.882	0.174	272	0.863	0.205	270	0.924	0.175	1124

Right femoral neck (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.780	0.097	153	0.786	0.117	149	0.727	0.114	134	0.697	0.117	138	0.749	0.117	574
Female	0.764	0.105	145	0.715	0.095	134	0.629	0.091	138	0.591	0.094	131	0.677	0.118	548
Total	0.772	0.101	298	0.752	0.112	283	0.677	0.114	272	0.646	0.118	269	0.714	0.123	1122

Right trochanter region (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.669	0.097	153	0.692	0.106	149	0.665	0.113	134	0.633	0.110	138	0.666	0.108	574
Female	0.650	0.102	145	0.612	0.096	134	0.530	0.089	138	0.495	0.097	131	0.573	0.114	548
Total	0.660	0.100	298	0.654	0.109	283	0.597	0.122	272	0.566	0.124	269	0.621	0.120	1122

Right Wards triangle (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.613	0.123	153	0.590	0.132	149	0.522	0.122	134	0.457	0.124	138	0.548	0.139	574
Female	0.653	0.135	145	0.567	0.134	134	0.420	0.120	138	0.380	0.120	131	0.508	0.169	548
Total	0.633	0.130	298	0.579	0.134	283	0.470	0.131	272	0.419	0.128	269	0.529	0.156	1122

Left femoral neck (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.800	0.099	153	0.803	0.117	149	0.741	0.114	134	0.710	0.118	138	0.765	0.118	574
Female	0.769	0.108	145	0.720	0.094	134	0.638	0.090	138	0.602	0.102	130	0.684	0.119	547
Total	0.785	0.104	298	0.764	0.115	283	0.688	0.115	272	0.657	0.123	268	0.726	0.125	1121

Left trochanter region (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.676	0.099	153	0.699	0.110	149	0.670	0.118	134	0.632	0.116	138	0.670	0.113	574
Female	0.657	0.101	145	0.611	0.099	134	0.535	0.090	138	0.497	0.094	130	0.577	0.115	547
Total	0.667	0.100	298	0.657	0.113	283	0.602	0.124	272	0.567	0.126	268	0.625	0.123	1121

Left Wards triangle (g/cm²)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.610	0.130	153	0.590	0.130	149	0.520	0.126	134	0.455	0.115	138	0.546	0.139	574
Female	0.652	0.135	145	0.556	0.136	134	0.417	0.120	138	0.382	0.115	130	0.505	0.167	547
Total	0.630	0.134	298	0.574	0.133	283	0.468	0.133	272	0.419	0.121	268	0.526	0.155	1121

Peripheral quantitative computed tomography (pQCT) (Densiscan 1000)

D50 (trabecular bone density over the core volume of ultradistal radius) (mg/cm³)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	293.0	67.6	151	269.8	63.9	148	256.9	69.0	133	243.1	66.7	137	266.5	69.1	569
Female	245.3	61.2	144	203.0	69.7	135	148.1	52.6	138	140.9	61.8	131	185.4	74.9	548
Total	269.7	68.7	295	237.9	74.5	283	201.5	81.9	271	193.1	82.1	268	226.7	82.6	1117

D100 (cortical and trabecular bone density of ultradistal radius) (mg/cm³)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	581.2	83.6	151	554.4	82.3	148	537.2	109.0	133	489.5	82.5	137	541.9	95.4	569
Female	604.3	86.1	144	516.5	100.3	135	418.3	83.4	138	392.5	90.2	131	485.2	123.5	548
Total	592.5	85.4	295	536.3	93.1	283	476.7	113.5	271	442.1	98.9	268	514.1	113.6	1117

P100 (cortical bone density of proximal radius) (mg/cm³)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1253.5	117.6	151	1197.9	133.5	148	1167.6	138.4	133	1111.0	171.9	137	1184.7	149.9	569
Female	1359.6	128.3	144	1219.3	158.3	135	1057.3	136.8	138	970.4	160.9	131	1155.9	209.5	548
Total	1305.3	133.7	295	1208.1	146.0	283	1111.5	148.0	271	1042.3	180.6	268	1170.5	182.1	1117

VI. Blood and Urine Analysis

VI. Blood and Urine Analysis

Venous blood sample and urine were obtained after an overnight fast.

Urine is analyzed using semi-quantitative test tape.

1) Blood analysis

Total protein (g/dl)
Total Bilirubin (mg/dl)
Triglyceride (mg/dl)
Total cholesterol (mg/dl)
Urea nitrogen (mg/dl)
Uric acid (mg/dl)
Creatinine (mg/dl)
Sodium (mEq/l)
Chlorine (mEq/l)
Potassium (mEq/l)
Calcium (mg/dl)
Glutamate oxaloacetate transaminase, GOT (IU/l)
Glutamate pyruvate transaminase, GPT (IU/l)
Lactate dehydrogenase, LDH (IU/l)
Phosphorus (mg/dl)
Alkaline phosphatase (IU/l)
Gamma-glutamyltransferase (IU/l)
Cholinesterase (IU/l)
Magnesium (mg/dl)
Lipid peroxide (nmol/ml)
Iron (μ g/dl)
Copper (μ g/dl)
Zinc (μ g/dl)
Vitamin A (IU/dl)
Free triiodothyronine, Free T3 (pg/ml)
Free thyroxine, Free T4 (ng/dl)
Thyroid stimulating hormone, TSH (μ g/ml)
Dehydroepiandrosterone sulfate, DHEA-S (ng/ml)
Insulin (μ U/ml)
Sialic acid (mg/dl)

HDL-cholesterol (mg/dl)
Fasting glucose (mg/dl)
Hemoglobin A1c (%)
Albumin (mg/dl) electrophoresis
Albumin (mg/dl) direct method
Alpha 1-globulin (mg/dl) electrophoresis
Alpha 2-globulin (mg/dl) electrophoresis
Beta-globulin (mg/dl) electrophoresis
Gamma-globulin (mg/dl) electrophoresis
A/G ratio

Dihomo-gamma-linolenic acid, DHLA (μ g/ml)
Arachidonic acid, AA (μ g/ml)
Eicosapentaenoic acid, EPA (μ g/ml)
Docosahexaenoic acid, DHA (μ g/ml)
EPA/AA ratio

Estradiol (pg/ml)
Total testosterone (ng/dl)
Free testosterone (pg/dl)
Sex hormone binding globulin (nmol/l)

White blood cell count (/ μ l)
Red blood cell count (x10000/ μ l)
Hemoglobin (g/dl)
Hematocrit (%)
MCV (fl)
MCH (pg)
MCHC (%)
Platelet count (x10000/ μ l)

2) Urine analysis

Hemoglobin

Occult blood

Ketone body

Bilirubin

Urobilinogen

Protein

Glucose

PH

Nitrite

1) Blood analysis

Total protein (g/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	7.9	0.4	155	7.8	0.5	149	8.0	0.5	134	7.9	0.5	138	7.9	0.5	576
Female	8.0	0.4	144	7.9	0.5	134	8.1	0.6	139	8.1	0.5	135	8.0	0.5	552
Total	7.9	0.4	299	7.9	0.5	283	8.1	0.5	273	8.0	0.5	273	8.0	0.5	1128

Total Bilirubin (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	0.9	0.5	155	0.8	0.3	149	0.8	0.3	134	0.7	0.3	138	0.8	0.4	576
Female	0.7	0.3	144	0.7	0.3	134	0.6	0.2	139	0.6	0.2	135	0.7	0.3	552
Total	0.8	0.4	299	0.7	0.3	283	0.7	0.3	273	0.7	0.2	273	0.7	0.3	1128

Triglyceride (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	140.9	113.7	150	127.4	72.7	147	130.1	62.0	131	123.4	58.4	133	130.7	81.0	561
Female	92.3	64.6	138	96.9	45.7	132	125.9	66.3	136	120.7	59.0	128	108.8	61.2	534
Total	117.6	96.4	288	112.9	63.2	279	127.9	64.1	267	122.1	58.6	261	120.0	72.8	1095

Total cholesterol (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	212.5	30.0	155	218.6	36.4	149	209.4	32.7	134	209.7	31.9	138	212.7	32.9	576
Female	210.4	31.8	144	232.9	34.0	134	232.8	35.5	139	231.5	31.7	135	226.6	34.6	552
Total	211.5	30.8	299	225.4	35.9	283	221.3	36.1	273	220.5	33.6	273	219.5	34.4	1128

Urea nitrogen (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	14.5	2.6	16	15.1	3.6	14	17.4	5.3	28	16.7	3.8	16	16.2	4.3	74
Female	13.4	3.6	15	14.7	2.5	16	14.8	4.0	22	15.5	3.6	22	14.7	3.6	75
Total	14.0	3.1	31	14.9	3.0	30	16.3	5.0	50	16.0	3.7	38	15.4	4.0	149

Uric acid (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	5.7	1.2	155	5.6	1.2	149	5.5	1.4	134	5.7	1.3	138	5.6	1.3	576
Female	4.0	0.8	144	4.3	1.1	134	4.6	1.1	139	4.7	1.1	135	4.4	1.1	552
Total	4.9	1.4	299	5.0	1.3	283	5.0	1.3	273	5.2	1.3	273	5.0	1.3	1128

Creatinine (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.0	0.2	155	1.0	0.1	149	1.0	0.5	134	1.1	0.3	138	1.0	0.3	576
Female	0.7	0.1	144	0.7	0.1	134	0.8	0.1	139	0.8	0.2	135	0.8	0.1	552
Total	0.9	0.2	299	0.9	0.2	283	0.9	0.4	273	0.9	0.2	273	0.9	0.3	1128

Sodium (mEq/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	143.6	2.1	16	142.7	1.3	14	142.3	1.4	28	142.4	1.9	16	142.7	1.7	74
Female	141.1	1.3	15	142.4	1.6	16	143.4	1.4	22	142.7	2.0	22	142.5	1.8	75
Total	142.4	2.2	31	142.5	1.4	30	142.8	1.5	50	142.6	2.0	38	142.6	1.8	149

Chlorine (mEq/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	103.4	2.9	16	101.4	2.5	14	101.6	2.2	28	102.6	2.1	16	102.2	2.4	74
Female	102.9	2.5	15	102.4	2.9	16	103.2	1.8	22	102.7	2.6	22	102.8	2.4	75
Total	103.2	2.7	31	101.9	2.7	30	102.3	2.1	50	102.7	2.4	38	102.5	2.5	149

Potassium (mEq/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	4.4	0.4	16	4.0	0.3	14	4.1	0.3	28	4.3	0.4	16	4.2	0.4	74
Female	4.1	0.4	15	4.0	0.2	16	4.1	0.4	22	4.3	0.3	22	4.1	0.3	75
Total	4.2	0.4	31	4.0	0.3	30	4.1	0.4	50	4.3	0.3	38	4.2	0.4	149

Calcium (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	9.4	0.3	155	9.3	0.3	149	9.2	0.3	134	9.2	0.3	138	9.3	0.3	576
Female	9.1	0.3	144	9.3	0.3	134	9.3	0.3	139	9.3	0.4	135	9.2	0.4	552
Total	9.2	0.3	299	9.3	0.3	283	9.3	0.3	273	9.2	0.4	273	9.3	0.3	1128

Glutamate oxaloacetate transaminase, GOT (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	24.1	8.5	155	28.6	28.2	149	30.2	27.9	134	27.0	14.4	138	27.4	21.4	576
Female	21.6	9.9	144	22.8	6.2	134	26.8	17.1	139	25.8	8.8	135	24.2	11.5	552
Total	22.9	9.2	299	25.9	21.1	283	28.5	23.1	273	26.4	11.9	273	25.8	17.3	1128

Glutamate pyruvate transaminase, GPT (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	29.3	17.5	155	31.2	38.5	149	27.3	24.1	134	22.9	16.3	138	27.8	25.9	576
Female	19.3	15.8	144	21.0	11.8	134	23.4	24.3	139	19.2	11.2	135	20.7	16.7	552
Total	24.5	17.4	299	26.3	29.5	283	25.3	24.2	273	21.1	14.1	273	24.3	22.2	1128

Lactate dehydrogenase, LDH (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	318.5	47.8	16	337.1	48.5	14	340.7	51.6	28	359.8	53.5	16	339.4	51.5	74
Female	311.3	53.4	15	376.1	101.3	16	379.4	64.9	22	413.2	60.0	22	375.0	78.1	75
Total	315.0	49.9	31	357.9	82.2	30	357.7	60.4	50	390.7	62.6	38	357.3	68.4	149

Phosphorus (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	3.2	0.4	155	3.1	0.4	149	3.2	0.4	134	3.1	0.3	138	3.1	0.4	576
Female	3.4	0.5	144	3.6	0.4	134	3.6	0.4	139	3.6	0.4	135	3.6	0.4	552
Total	3.3	0.4	299	3.4	0.5	283	3.4	0.5	273	3.3	0.5	273	3.3	0.5	1128

Alkaline phosphatase (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	160.9	44.6	155	164.9	43.5	149	180.6	64.0	134	176.9	49.2	138	170.4	51.1	576
Female	133.9	38.5	144	179.0	49.5	134	196.1	63.8	139	194.3	50.1	135	175.3	57.1	552
Total	147.9	43.9	299	171.6	46.9	283	188.5	64.3	273	185.5	50.4	273	172.8	54.1	1128

Gamma-glutamyltransferase (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	64.5	84.0	155	73.6	80.4	149	75.5	139.9	134	39.6	34.0	138	63.5	92.5	576
Female	27.6	31.0	144	31.2	22.1	134	33.2	48.5	139	26.4	17.7	135	29.6	32.3	552
Total	46.7	66.7	299	53.5	63.8	283	54.0	105.9	273	33.1	27.9	273	46.9	71.8	1128

Cholinesterase (IU/l)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	394.4	87.6	155	388.8	85.5	149	365.6	70.2	134	335.7	70.2	138	372.2	82.4	576
Female	341.8	61.7	144	377.1	88.7	134	393.7	81.9	139	375.7	78.9	135	371.7	80.3	552
Total	369.1	80.5	299	383.2	87.1	283	379.9	77.5	273	355.5	77.2	273	371.9	81.3	1128

Magnesium (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	2.2	0.1	155	2.2	0.1	149	2.2	0.1	134	2.1	0.1	138	2.2	0.1	576
Female	2.1	0.1	144	2.1	0.1	134	2.1	0.2	139	2.1	0.2	135	2.1	0.2	552
Total	2.1	0.1	299	2.1	0.1	283	2.2	0.1	273	2.1	0.2	273	2.1	0.1	1128

Lipid peroxide (nmol/ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	3.2	0.6	155	3.4	0.7	149	3.3	0.6	134	3.4	0.6	138	3.3	0.6	576
Female	3.0	0.5	144	3.2	0.6	134	3.1	0.5	139	3.2	0.6	135	3.1	0.6	552
Total	3.1	0.5	299	3.3	0.6	283	3.2	0.6	273	3.3	0.6	273	3.2	0.6	1128

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

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	125.9	43.6	155	119.5	39.4	149	121.8	39.5	134	115.4	35.7	138	120.8	39.9	576
Female	100.5	48.1	144	105.2	34.6	134	102.0	30.1	139	101.0	30.4	135	102.2	36.7	552
Total	113.7	47.5	299	112.8	37.8	283	111.7	36.4	273	108.3	33.9	273	111.7	39.4	1128

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

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	87.1	12.7	16	86.5	16.3	14	94.5	14.2	28	89.4	10.2	16	90.3	13.7	74
Female	93.3	20.2	15	92.6	13.1	16	99.5	15.8	22	104.4	16.4	22	98.2	16.8	75
Total	90.1	16.8	31	89.8	14.7	30	96.7	15.0	50	98.1	15.8	38	94.3	15.8	149

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

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	94.1	12.0	155	93.5	12.9	149	93.4	13.0	134	88.3	12.0	138	92.4	12.7	576
Female	90.4	12.6	144	93.4	13.8	134	93.2	14.3	139	89.4	13.5	135	91.6	13.7	552
Total	92.3	12.4	299	93.5	13.3	283	93.3	13.7	273	88.8	12.8	273	92.0	13.2	1128

Vitamin A (IU/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	230.2	50.5	155	240.7	63.0	149	231.6	64.3	134	208.3	50.8	138	228.0	58.4	576
Female	169.2	39.7	144	186.4	39.2	134	196.1	43.8	139	192.7	52.7	135	185.9	45.2	552
Total	200.9	54.8	299	215.0	59.5	283	213.5	57.5	273	200.6	52.2	273	207.4	56.4	1128

Free triiodothyronine, Free T3 (pg/ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	3.0	0.4	155	3.0	0.3	149	3.0	0.3	134	2.9	0.3	138	3.0	0.3	576
Female	2.9	0.4	144	2.9	0.3	134	2.9	0.4	139	2.9	0.3	135	2.9	0.4	552
Total	3.0	0.4	299	3.0	0.3	283	3.0	0.4	273	2.9	0.3	273	3.0	0.3	1128

Free thyroxine, Free T4 (ng/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.3	0.2	155	1.3	0.2	149	1.3	0.2	134	1.3	0.2	138	1.3	0.2	576
Female	1.2	0.2	144	1.2	0.2	134	1.3	0.2	139	1.2	0.2	135	1.2	0.2	552
Total	1.3	0.2	299	1.2	0.2	283	1.3	0.2	273	1.3	0.2	273	1.3	0.2	1128

Thyroid stimulating hormone, TSH (μ g/ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.5	0.8	155	1.8	1.2	149	2.0	1.4	134	2.1	1.6	138	1.8	1.3	576
Female	2.1	1.7	144	2.3	2.0	134	2.7	3.0	139	2.4	1.8	135	2.4	2.2	552
Total	1.8	1.4	299	2.1	1.7	283	2.4	2.4	273	2.2	1.7	273	2.1	1.8	1128

Dehydroepiandrosterone sulfate, DHEA-S (ng/ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	2244.7	873.9	155	1766.8	708.7	149	1382.1	587.7	134	1123.7	528.6	138	1651.8	813.9	576
Female	1284.5	580.7	144	1038.4	535.1	134	813.9	425.8	139	788.5	387.1	135	984.9	528.7	552
Total	1782.3	887.4	299	1421.9	729.0	283	1092.8	584.7	273	958.0	492.7	273	1325.5	765.4	1128

Insulin (μ U/ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	8.1	4.4	150	7.5	4.0	147	7.4	3.4	131	7.7	4.6	133	7.7	4.1	561
Female	7.8	3.4	138	7.2	3.1	132	8.8	4.7	136	9.4	5.7	128	8.3	4.4	534
Total	8.0	3.9	288	7.4	3.6	279	8.1	4.1	267	8.6	5.2	261	8.0	4.3	1095

Sialic acid (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	62.6	7.1	155	63.4	6.6	149	65.4	8.1	134	65.9	9.5	138	64.2	7.9	576
Female	62.3	7.0	144	61.7	8.0	134	66.3	7.2	139	67.8	8.3	135	64.5	8.0	552
Total	62.5	7.0	299	62.6	7.3	283	65.8	7.7	273	66.8	8.9	273	64.4	8.0	1128

HDL-cholesterol (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	57.3	15.2	155	60.0	16.0	149	56.8	16.4	134	56.1	13.4	138	57.6	15.3	576
Female	68.0	15.0	144	68.4	16.0	134	65.4	15.4	139	63.9	17.0	135	66.4	15.9	552
Total	62.5	16.0	299	64.0	16.5	283	61.2	16.4	273	60.0	15.7	273	61.9	16.2	1128

Fasting glucose (mg/dl)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	101.6	17.0	150	106.4	19.0	147	105.1	24.4	130	109.5	26.7	133	105.5	22.0	560
Female	94.6	8.3	138	97.7	18.1	132	103.5	25.0	136	107.8	26.4	128	100.8	21.2	534
Total	98.2	14.0	288	102.3	19.1	279	104.3	24.7	266	108.7	26.5	261	103.2	21.7	1094

Hemoglobin A1c (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	5.1	0.6	154	5.4	0.7	149	5.3	0.9	133	5.6	0.8	138	5.3	0.8	574
Female	4.9	0.3	144	5.2	0.5	134	5.3	0.8	139	5.5	0.9	135	5.2	0.7	552
Total	5.0	0.5	298	5.3	0.6	283	5.3	0.8	272	5.5	0.9	273	5.3	0.7	1126

Albumin (mg/dl) electrophoresis

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	5264.4	397.1	16	5225.0	336.6	14	5182.3	343.6	28	4865.9	254.3	16	5139.7	362.6	74
Female	4978.0	232.7	15	5167.8	176.8	16	5118.9	372.4	22	5064.6	235.0	22	5085.2	275.5	75
Total	5125.8	353.9	31	5194.5	260.4	30	5154.4	354.3	50	4980.9	259.7	38	5112.3	321.8	149

Albumin (mg/dl) direct method

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	4594.5	311.4	139	4497.6	291.6	135	4459.1	347.8	106	4361.5	363.8	122	4483.2	337.6	502
Female	4441.6	322.9	129	4481.1	297.4	118	4421.7	308.9	117	4397.8	363.3	113	4436.1	324.0	477
Total	4520.9	325.5	268	4489.9	293.8	253	4439.5	327.7	223	4378.9	363.2	235	4460.3	331.7	979

Alpha 1-globulin (mg/dl) electrophoresis

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	175.8	18.7	16	190.2	22.8	14	211.1	35.2	28	211.6	26.3	16	199.6	31.5	74
Female	190.1	21.6	15	189.2	18.7	16	215.0	22.8	22	204.8	21.9	22	201.5	23.6	75
Total	182.7	21.1	31	189.7	20.4	30	212.8	30.2	50	207.6	23.8	38	200.6	27.7	149

Alpha 2-globulin (mg/dl) electrophoresis

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	567.2	58.2	16	606.1	97.2	14	655.0	100.9	28	625.2	72.8	16	620.3	91.4	74
Female	584.1	63.2	15	616.5	83.4	16	676.2	76.3	22	661.8	75.8	22	640.8	82.1	75
Total	575.4	60.3	31	611.6	88.7	30	664.3	90.6	50	646.4	75.8	38	630.6	87.1	149

Beta-globulin (mg/dl) electrophoresis

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	724.5	96.5	16	733.2	88.5	14	768.7	104.1	28	735.1	88.9	16	745.2	96.4	74
Female	745.3	88.5	15	781.4	87.6	16	794.1	105.9	22	762.3	107.3	22	772.3	99.1	75
Total	734.5	91.7	31	758.9	89.8	30	779.9	104.6	50	750.8	99.6	38	758.8	98.4	149

Gamma-globulin (mg/dl) electrophoresis

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1049.3	183.5	16	1245.4	276.4	14	1336.4	298.2	28	1356.1	342.2	16	1261.4	302.5	74
Female	1255.8	149.0	15	1339.0	300.0	16	1332.2	587.7	22	1202.0	289.8	22	1280.2	384.4	75
Total	1149.2	195.5	31	1295.3	288.2	30	1334.5	443.9	50	1266.9	317.9	38	1270.8	345.1	149

A/G ratio

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	2.1	0.3	16	1.9	0.2	14	1.8	0.2	28	1.7	0.3	16	1.9	0.3	74
Female	1.8	0.1	15	1.8	0.2	16	1.7	0.3	22	1.8	0.3	22	1.8	0.2	75
Total	2.0	0.3	31	1.8	0.2	30	1.8	0.3	50	1.8	0.3	38	1.8	0.3	149

Dihomo-gamma-linolenic acid, DHLA ($\mu\text{g/ml}$)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	31.2	11.7	155	30.1	10.1	149	30.5	9.1	134	29.5	9.4	138	30.3	10.2	576
Female	27.9	9.7	144	30.1	10.8	134	36.0	11.5	139	34.9	11.9	135	32.2	11.4	552
Total	29.6	10.9	299	30.1	10.4	283	33.3	10.7	273	32.1	11.0	273	31.2	10.9	1128

Arachidonic acid, AA ($\mu\text{g/ml}$)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	155.0	38.9	155	154.3	33.1	149	144.3	34.4	134	143.8	32.4	138	149.6	35.2	576
Female	149.4	32.0	144	155.7	37.0	134	161.9	35.0	139	152.3	35.2	135	154.8	35.0	552
Total	152.3	35.8	299	155.0	34.9	283	153.2	35.7	273	148.0	34.0	273	152.2	35.2	1128

Eicosapentaenoic acid, EPA ($\mu\text{g/ml}$)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	55.7	29.8	155	84.1	48.8	149	69.0	36.3	134	71.3	37.3	138	69.9	39.9	576
Female	55.6	29.9	144	71.6	32.5	134	72.5	34.5	139	68.2	31.2	135	66.8	32.7	552
Total	55.6	29.8	299	78.2	42.3	283	70.8	35.4	273	69.8	34.4	273	68.4	36.6	1128

Docosahexaenoic acid, DHA ($\mu\text{g/ml}$)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	129.6	49.4	155	161.6	66.1	149	151.6	51.5	134	154.6	49.9	138	149.0	56.0	576
Female	124.1	34.8	144	150.3	38.0	134	165.8	47.2	139	158.9	45.7	135	149.4	44.6	552
Total	126.9	43.0	299	156.2	54.8	283	158.8	49.8	273	156.7	47.8	273	149.2	50.7	1128