

Figure S1. Flow chart showing number and how participants were selected for this analysis.

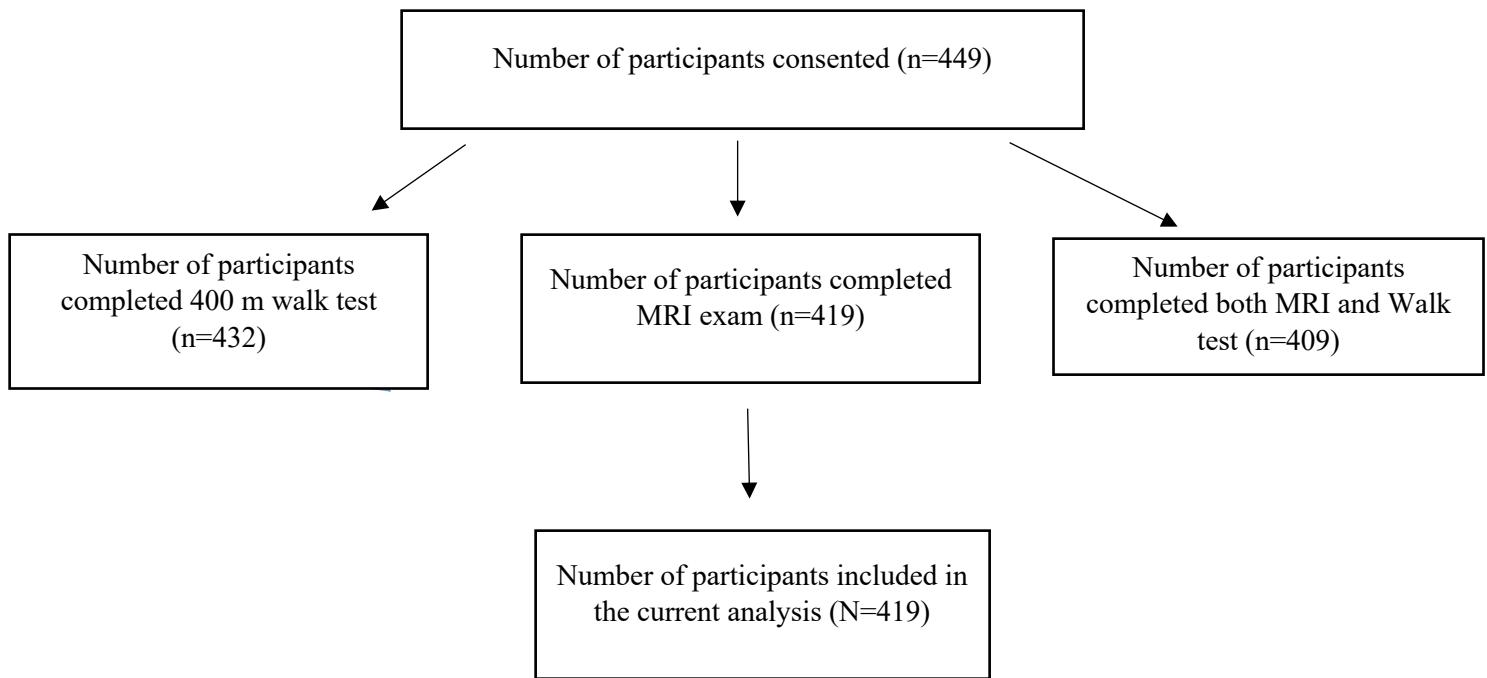


Table S1. MRI fat by BMI category stratified by sex

	Males less than 25 (Underweight) (N=33)	25 to less than 30 (Over (N=104)	Greater than 30 (Obese) (N=111)	p-value
SAT	3141.1[2177.9,5383.2]	6372.4[5202.3,7943.8]	11373.8[8388.4,14845.0]	<0.001 ^b
VAT	3666.3[2360.3,5467.1]	6266.4[5000.7,8112.7]	9232.3[6588.0,12528.3]	<0.001 ^b
	Females less than 25 (Underweight) (N=28)	25 to less than 30 (Over (N=46)	Greater than 30 (Obese) (N=96)	p-value
SAT	5826.4[4391.8,8247.8]	10026.3[8438.2,13077.4]	15579.3[12283.7,20468.1]	<0.001 ^b
VAT	1949.4[1556.2,4031.5]	4399.5[3392.9,6179.8]	5305.1[4048.8,7400.2]	<0.001 ^b

Statistics presented as Median [P25, P75], p-values: b=Kruskal-Wallis test,

Table S2. MRI fat by waist circumference (<88cm or <102cm) category stratified by sex

Male	Above Normal WC (N=136)	Normal Waist C (N=93)	p-value
SAT	9830.7[7014.9,13365.1]	5458.2[3985.1,6844.2]	<0.001 ^b
VAT	8416.6[6447.8,11274.0]	5121.8[3622.5,6627.0]	<0.001 ^b
Female	Above Normal WC (N=124)	Normal Waist C (N=26)	p-value
SAT	14047.3[10121.9,18650.2]	6188.8[5028.7,9891.9]	<0.001 ^b
VAT	5219.9[3924.7,7112.7]	1979.5[1513.8,3859.3]	<0.001 ^b

Statistics presented as Median [P25, P75], p-values: b=Kruskal-Wallis test,

Table S3. Multivariable linear regression of different quartiles of adipokines, insulin resistance, inflammatory markers (log-transformed) and lipid profile with VAT, SAT, liver fat, and physical function

Quartile vs. Q1	Outcome	N Used	Estimate	StdErr	Probt
SAT					
Q2	HMW Adiponectin	402	-0.20	0.12	0.084
Q3	HMW Adiponectin	402	-0.22	0.12	0.057
Q4	HMW Adiponectin	402	-0.60	0.12	<0.001
Q2	HOMA IR	373	0.19	0.13	0.13
Q3	HOMA IR	373	0.19	0.13	0.13
Q4	HOMA IR	373	0.54	0.13	<0.001
Q2	IL-6	403	0.00	0.12	0.99
Q3	IL-6	403	0.10	0.12	0.42
Q4	IL-6	403	0.16	0.12	0.19
Q2	Leptin	403	0.71	0.13	<0.001
Q3	Leptin	403	1.09	0.13	<0.001
Q4	Leptin	403	1.8	0.13	<0.001
Q2	Resistin	402	-0.12	0.07	0.094
Q3	Resistin	402	0.04	0.08	0.64
Q4	Resistin	402	0.05	0.08	0.50
Q2	TNFAR1	403	-0.09	0.04	0.025
Q3	TNFAR1	403	-0.04	0.04	0.25
Q4	TNFAR1	403	-0.02	0.04	0.64
Q2	TNFAR2	402	-0.02	0.06	0.68
Q3	TNFAR2	402	0.00	0.06	0.96
Q4	TNFAR2	402	-0.02	0.06	0.76
Q2	Total adiponectin	402	-0.20	0.11	0.070
Q3	Total adiponectin	402	-0.23	0.11	0.044
Q4	Total adiponectin	402	-0.59	0.12	<0.001
Q2	HDL cholesterol	376	-0.07	0.05	0.12
Q3	HDL cholesterol	376	-0.12	0.05	0.014
Q4	HDL cholesterol	376	-0.17	0.05	<0.001
Q2	LDL cholesterol	375	3.1	6.0	0.60
Q3	LDL cholesterol	375	9.3	6.1	0.13
Q4	LDL cholesterol	375	6.8	6.3	0.28
Q2	Triglycerides	375	0.08	0.07	0.26
Q3	Triglycerides	375	0.15	0.07	0.047
Q4	Triglycerides	375	0.28	0.08	<0.001
VAT					
Q2	HMW Adiponectin	402	-0.47	0.11	<0.001
Q3	HMW Adiponectin	402	-0.68	0.12	<0.001
Q4	HMW Adiponectin	402	-0.87	0.12	<0.001
Q2	HOMA IR	373	0.32	0.13	0.014

<i>Quartile vs. Q1</i>	<i>Outcome</i>	<i>N Used</i>	<i>Estimate</i>	<i>StdErr</i>	<i>Probt</i>
Q3	HOMA IR	373	0.44	0.13	<0.001
Q4	HOMA IR	373	0.60	0.13	<0.001
Q2	IL-6	403	0.23	0.12	0.055
Q3	IL-6	403	0.00	0.12	0.98
Q4	IL-6	403	0.12	0.13	0.32
Q2	Leptin	403	0.58	0.14	<0.001
Q3	Leptin	403	0.91	0.15	<0.001
Q4	Leptin	403	1.4	0.15	<0.001
Q2	Resistin	402	0.13	0.08	0.098
Q3	Resistin	402	0.14	0.08	0.076
Q4	Resistin	402	0.16	0.08	0.046
Q2	TNFAR1	403	-0.01	0.04	0.82
Q3	TNFAR1	403	-0.01	0.04	0.86
Q4	TNFAR1	403	0.01	0.04	0.85
Q2	TNFAR2	402	0.07	0.06	0.24
Q3	TNFAR2	402	0.04	0.06	0.55
Q4	TNFAR2	402	-0.01	0.06	0.90
Q2	Total adiponectin	402	-0.39	0.11	<0.001
Q3	Total adiponectin	402	-0.60	0.11	<0.001
Q4	Total adiponectin	402	-0.79	0.12	<0.001
Q2	HDL cholesterol	376	-0.11	0.05	0.015
Q3	HDL cholesterol	376	-0.14	0.05	0.004
Q4	HDL cholesterol	376	-0.21	0.05	<0.001
Q2	LDL cholesterol	375	12.3	6.0	0.043
Q3	LDL cholesterol	375	10.8	6.3	0.086
Q4	LDL cholesterol	375	6.1	6.4	0.34
Q2	Triglycerides	375	0.17	0.07	0.016
Q3	Triglycerides	375	0.31	0.07	<0.001
Q4	Triglycerides	375	0.42	0.08	<0.001
Liver fat					
Q2	HMW Adiponectin	402	-0.30	0.12	0.014
Q3	HMW Adiponectin	402	-0.38	0.13	0.004
Q4	HMW Adiponectin	402	-0.48	0.13	<0.001
Q2	HOMA IR	373	0.26	0.13	0.044
Q3	HOMA IR	373	0.30	0.14	0.031
Q4	HOMA IR	373	0.52	0.14	<0.001
Q2	IL-6	403	-0.20	0.12	0.11
Q3	IL-6	403	-0.09	0.13	0.50
Q4	IL-6	403	-0.16	0.13	0.22
Q2	Leptin	403	0.45	0.16	0.004

<i>Quartile vs. Q1</i>	<i>Outcome</i>	<i>N Used</i>	<i>Estimate</i>	<i>StdErr</i>	<i>Probt</i>
Q3	Leptin	403	0.54	0.17	0.001
Q4	Leptin	403	0.67	0.17	<0.001
Q2	Resistin	402	0.02	0.08	0.76
Q3	Resistin	402	-0.05	0.08	0.54
Q4	Resistin	402	0.07	0.08	0.40
Q2	TNFAR1	403	-0.02	0.04	0.70
Q3	TNFAR1	403	-0.04	0.04	0.32
Q4	TNFAR1	403	-0.03	0.04	0.52
Q2	TNFAR2	402	-0.11	0.06	0.066
Q3	TNFAR2	402	-0.07	0.06	0.30
Q4	TNFAR2	402	-0.06	0.06	0.32
Q2	Total adiponectin	402	-0.28	0.12	0.016
Q3	Total adiponectin	402	-0.38	0.12	0.002
Q4	Total adiponectin	402	-0.45	0.13	<0.001
Q2	HDL cholesterol	376	-0.03	0.05	0.49
Q3	HDL cholesterol	376	-0.10	0.05	0.045
Q4	HDL cholesterol	376	-0.09	0.05	0.069
Q2	LDL cholesterol	375	15.6	6.1	0.011
Q3	LDL cholesterol	375	17.0	6.5	0.010
Q4	LDL cholesterol	375	13.0	6.5	0.048
Q2	Triglycerides	375	0.10	0.07	0.17
Q3	Triglycerides	375	0.21	0.08	0.008
Q4	Triglycerides	375	0.23	0.08	0.004

400 m walk test

<i>Quartile vs. Q1</i>	<i>Outcome</i>	<i>N Used</i>	<i>Estimate</i>	<i>StdErr</i>	<i>Probt</i>
Q2	HMW Adiponectin	392	-0.02	0.12	0.84
Q3	HMW Adiponectin	392	0.09	0.12	0.46
Q4	HMW Adiponectin	392	0.13	0.13	0.33
Q2	HOMA IR	363	0.05	0.13	0.67
Q3	HOMA IR	363	0.02	0.13	0.89
Q4	HOMA IR	363	-0.19	0.14	0.18
Q2	IL-6	393	0.07	0.12	0.57
Q3	IL-6	393	0.37	0.12	0.002
Q4	IL-6	393	0.27	0.13	0.041
Q2	Leptin	393	0.31	0.12	0.013
Q3	Leptin	393	0.12	0.12	0.35
Q4	Leptin	393	0.24	0.14	0.079

<i>Quartile vs. Q1</i>	<i>Outcome</i>	<i>N Used</i>	<i>Estimate</i>	<i>StdErr</i>	<i>Probt</i>
Q2	Resistin	392	-0.11	0.08	0.15
Q3	Resistin	392	-0.03	0.08	0.75
Q4	Resistin	392	0.02	0.09	0.86
Q2	TNFAR1	393	0.04	0.04	0.34
Q3	TNFAR1	393	0.10	0.04	0.010
Q4	TNFAR1	393	0.15	0.04	<0.001
Q2	TNFAR2	392	-0.05	0.06	0.37
Q3	TNFAR2	392	0.03	0.06	0.60
Q4	TNFAR2	392	-0.02	0.07	0.74
Q2	Total adiponectin	392	-0.05	0.11	0.67
Q3	Total adiponectin	392	0.05	0.12	0.64
Q4	Total adiponectin	392	0.22	0.13	0.092
Q2	HDL cholesterol	366	-0.00	0.05	0.98
Q3	HDL cholesterol	366	-0.01	0.05	0.92
Q4	HDL cholesterol	366	-0.06	0.05	0.28
Q2	LDL cholesterol	366	8.3	6.3	0.19
Q3	LDL cholesterol	366	0.59	6.3	0.93
Q4	LDL cholesterol	366	2.0	7.1	0.78
Q2	Triglycerides	366	0.07	0.08	0.38
Q3	Triglycerides	366	-0.06	0.08	0.41
Q4	Triglycerides	366	0.04	0.09	0.62