

**Table S1:** Comparison of dietary intake parameters in lean, overweight, and obese

Dietary intake	Lean Group (10 M/10 F)	Overweight Group (12 M/ 8 F)	Obese Group (8 M/ 12 F)	p-value
<b>Total Calories (cal)</b>	2109.3 ± 722.4	2167 ± 538.2	2104 ± 748.3	0.6913
<b>Carbs (g)</b>	264.5 ± 95.8	265 ± 64.4	215.5 ± 103.7	0.2736
<b>Fat (g)</b>	66.9 ± 34.5	53 ± 27.33	76.4 ± 35.2	0.4053
<b>Protein (g)</b>	98 ± 42.3	96 ± 52.4	81.1 ± 27.3	0.6811
<b>Cholesterol (mg)</b>	232.6 ± 172.1	227 ± 125.3	212.2 ± 143.2	0.0872
<b>Sodium (mg)</b>	1123 ± 487.6	1624 ± 509.2	1351.558 ± 751.6	0.6942
<b>Sugars (g)</b>	86.79 ± 59.7	88 ± 28.3	107 ± 36.3	0.7775
<b>Fibre (g)</b>	14.5 ± 6	14 ± 7.9	9.9 ± 6.2	0.2778

All data are expressed as mean ± SD

**Table S2:** Comparison of physical activity parameters in lean, overweight, and obese

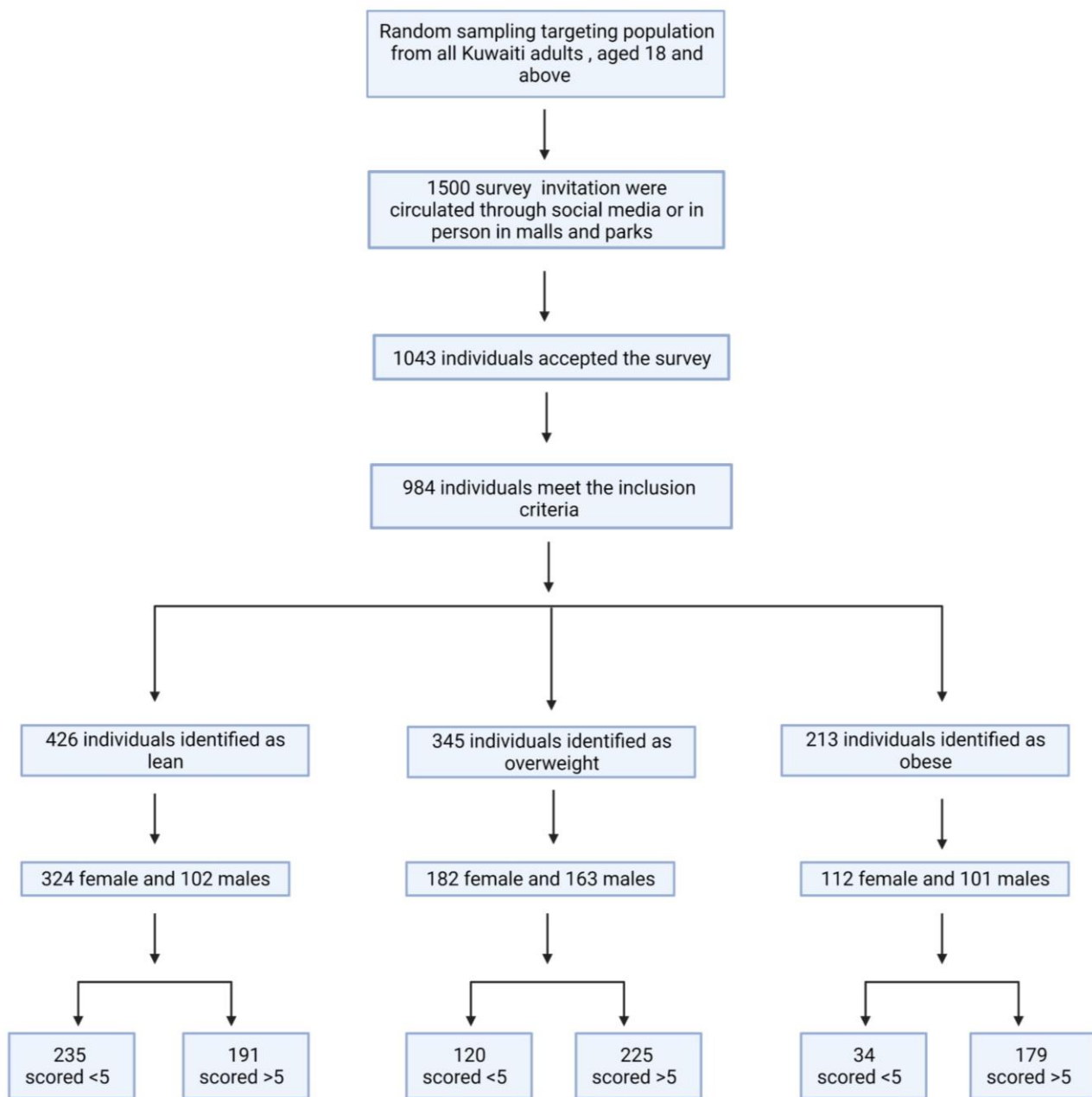
Physical activity	Lean Group (10 M/10 F)	Overweight Group (12 M / 8 F)	Obese Group (8M /12F)	p-value
<b>Time spent in sedentary (%)</b>	68.2 ± 8.2	69.9 ± 6.2	70.6 ± 4.3	0.5167
<b>Time spent in light activity (%)</b>	24.4 ± 6.2	24.3 ± 5.6	22.6 ± 3.2	0.5026
<b>Time spent in Moderate activity (%)</b>	5.8 ± 2.9	5.8 ± 2.1	5.7 ± 1.9	0.9796
<b>Time spent in hard activity (%)</b>	1.2 ± 0.9	0.86 ± 0.7	0.85 ± 0.6	0.3211
<b>Average MET rate/day</b>	1.5 ± 0.17	1.57 ± 0.1	1.54 ± 0.09	0.4660
<b>Average step count/day</b>	10707 ± 3446.2	16367.9 ± 30063.4	8464.4 ± 2999.2	0.3665
<b>Total working hours /per week</b>	30.5 ± 7.4	35.3 ± 8.8	33.0 ± 5.3	0.1438

All data are expressed as mean ± SD

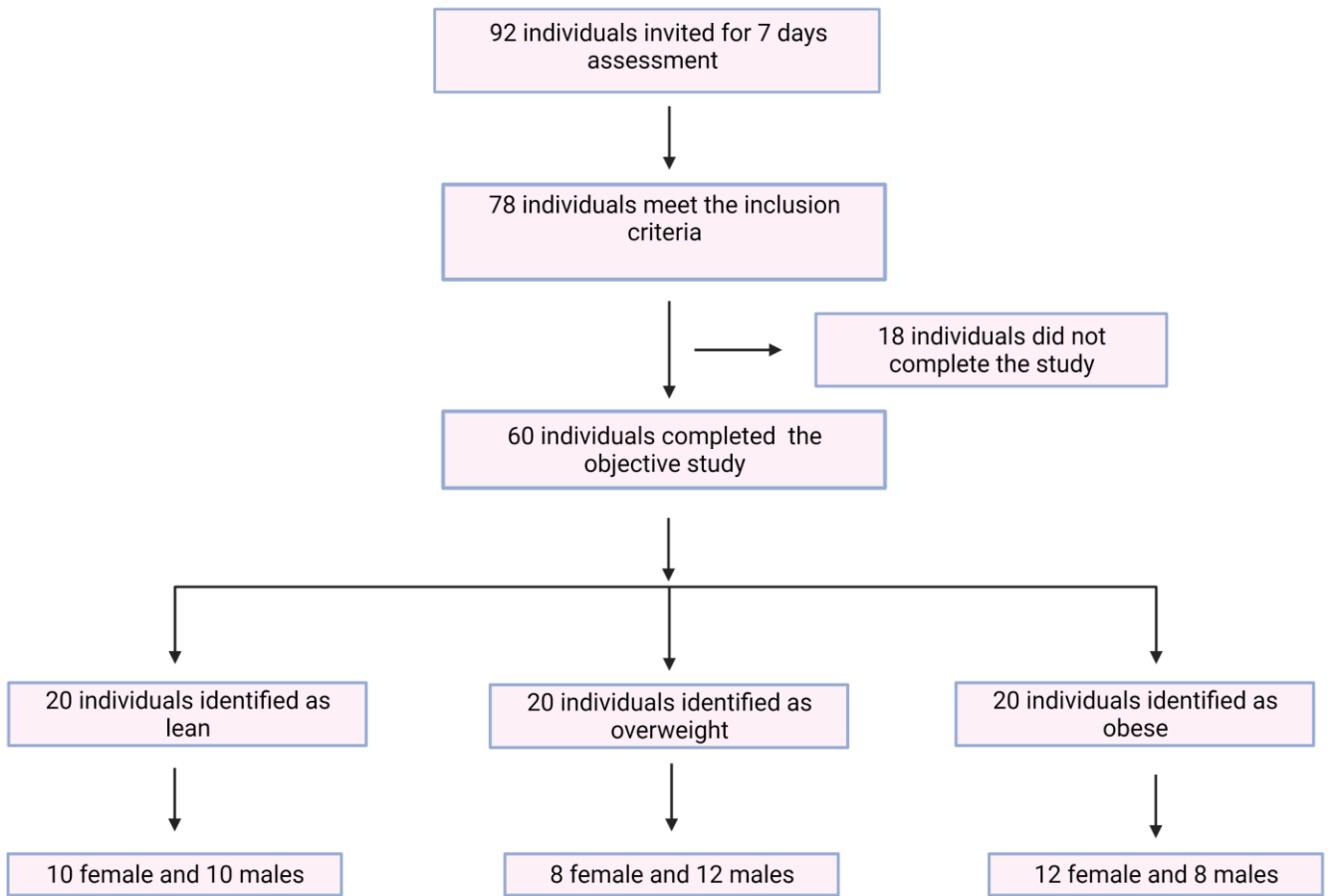
**Table S3:** Comparison of metabolic risk factors in lean, overweight, and obese

Fasting concentration of serum samples	Lean Group (10 M/10 F)	Overweight Group (12 M/8 F)	Obese Group (8 M / 12 F)	p-value
BP/ systolic (mmHg)	105 ± 9.2	106 ± 11.6	116.5 ± 9.5	0.0039
BP/diastolic (mmHg)	62.8 ± 9.6	68 ± 9	70.36 ± 10.1	0.0291
HR	66.5 ± 11.9	73 ± 10	75.7 ± 8.6	0.0252
Fasting glucose (mmol/l)	4.8 ± 1.3	5.08 ± 0.53	5.26 ± 0.94	0.0912
Triglycerides (mmol/l)	0.76 ± 0.29	1.00 ± 0.33	1.04 ± 0.15	0.0049
Total cholesterol (mmol/l)	4.4 ± 0.90	5.05 ± 0.55	5.16 ± 0.54	0.0043
HDL cholesterol (mmol/l)	1.5 ± 0.28	1.23 ± 0.21	1.16 ± 0.18	<0.0001
Insulin Con. (mu/l)	3.83 ± 0.88	5.03 ± 1.5	4.5 ± 0.74	0.0068
HOMA-IR	0.82 ± 0.22	1.13 ± 0.32	1.05 ± 0.15	0.0009
C-peptide	1.26 ± 0.22	1.31 ± 0.28	1.57 ± 0.38	0.0107
CRP (mg/dL)	0.16 ± 0.06	0.50 ± 0.28	0.53 ± 0.30	<0.0001
TNF-α (pg/ml)	16.5 ± 6.3	18.7 ± 9.6	28 ± 23.4	0.0542

All data are expressed as mean ± SD . P<0.05 was considered statistically significant , P<0.01 was considered highly significant , and P< 0.001/P< 0.0001 were considered extremely significant.



**Supplementary Figure S1.** Survey study participant flow diagram



**Supplementary Figure S2.** Objective study participant flow diagram.