

Supplementary Table 1 Classification of obesity according to the BMI [17]

Weight categories	BMI value (kg/m ²)
Underweight	< 18.5
Normal	18.5 – 24.9
Overweight	25 – 29.9
Obesity – Class 1	30 – 34.9
Obesity – Class 2	35 – 39.9
Obesity – Class 3	≥ 40

BMI: Body mass index

Source: Ministry of Health, Nutrition and Indigenous Medicine, Sri Lanka. Guidelines on Management of Overweight and Obesity Among Adults in Sri Lanka. 1st ed. Colombo: Non-Communicable Disease Unit, Ministry of Health 2018: 6. [17]

URL:

https://www.ncd.health.gov.lk/images/pdf/Guidelines/Guideline_Obesity.pdf

Supplementary Table 2 Categorization of abdominal adiposity in participants according to the waist circumference and waist-to-hip ratio [17]

Category	Waist circumference (cm)		Waist-to-hip ratio	
	Male	Female	Male	Female
Normal	< 90	< 80	< 0.90	< 0.80
A-risk	≥ 90	≥ 80	≥ 0.90	≥ 0.80

Source: Ministry of Health, Nutrition and Indigenous Medicine, Sri Lanka. Guidelines on Management of Overweight and Obesity Among Adults in Sri Lanka. 1st ed. Colombo: Non-Communicable Disease Unit, Ministry of Health 2018: 6. [17]

URL:

https://www.ncd.health.gov.lk/images/pdf/Guidelines/Guideline_Obesity.pdf

Supplementary Table 3 Classification criteria for HbA1c, lipid profile, and liver enzymes [19,20]

Metabolic parameter	Category	Cutoff value
HbA1c (%)	Normal	< 5.6
	Prediabetes	5.7 – 6.4
	Diabetes	> 6.5
Total cholesterol (mg/dL)	Desirable	< 200
	Borderline high	200 - 239
	High	≥ 240
Triglycerides (mg/dL)	Normal	< 150
	Borderline high	150 - 199
	High	200 - 499
	Very high	≥ 500
LDL (mg/dL)	Optimal	< 100
	Near-optimal	100 - 129
	Borderline high	130 - 159
	High	160 - 189
	Very high	≥ 190
HDL (mg/dL)	Low	< 40
	High	> 60
SGOT (U/L)	Normal	Up to 40 (For males)
		Up to 32 (For females)
SGPT (U/L)	Normal	Up to 41 (For males)
		Up to 33 (For females)

HbA1c: Glycated hemoglobin; HDL: High-density lipoproteins; LDL: Low-density lipoproteins; SGOT: Aspartate transaminase; SGPT: Alanine transaminase

Source 1: Ministry of Health, Nutrition and Indigenous Medicine, Sri Lanka. National Guideline for Management of Diabetes for Secondary and Tertiary Healthcare Level. 1st ed. Colombo: Non-Communicable Diseases Unit, Ministry of Health 2021: 9. [19]

URL:

https://www.ncd.health.gov.lk/images/pdf/circulars/final_dm_DM_for_secondary_and_tertiary_health_care_providers_feb3rd.pdf

Source 2: Ministry of Health, Nutrition and Indigenous Medicine, Sri Lanka. National Guideline for Management of Dyslipidaemia for Secondary and Tertiary Healthcare Level. 1st ed. Colombo: Non-Communicable Diseases Unit, Ministry of Health 2021:15. [20]

URL:

https://www.ncd.health.gov.lk/images/pdf/circulars/National_Dyslipidaemia_management_guideline.pdf

Supplementary Table 4 Correlation between gastric motility parameters, adiposity, and metabolic indicators of the total subjects

Parameter	Age (Years)		BMI (kg/m ²)		Body fat %		Waist circumference (cm)		Hip circumference (cm)		Waist/Hip ratio		HbA1c (%)		Total cholesterol (mg/dL)		Triglycerides (mg/dL)		LDL (mg/dL)		HDL (mg/dL)		VLDL (mg/dL)		SGOT (U/L)		SGPT (U/L)	
	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>
Fasting antral area (cm ²)	-0.280	0.001	0.096	0.278	-0.104	0.240	0.235	0.007	0.097	0.272	0.244	0.005	-0.019	0.826	-0.055	0.535	0.131	0.137	0.005	0.959	-0.227	0.009	0.135	0.125	0.080	0.363	0.103	0.241
Antral area in 1 min (cm ²)	0.160	0.069	0.140	0.112	-0.002	0.986	0.110	0.215	0.076	0.389	0.115	0.193	0.047	0.592	0.086	0.333	0.194	0.027	0.095	0.280	-0.142	0.108	0.195	0.026	0.063	0.478	0.071	0.421
Antral area in 15 min (cm ²)	0.063	0.475	0.153	0.083	0.058	0.515	0.046	0.607	0.155	0.078	-0.074	0.404	-0.047	0.598	-0.029	0.745	-0.019	0.826	0.000	0.998	-0.070	0.426	-0.025	0.776	0.088	0.321	0.071	0.424
Frequency of antral contractions (3 min)	-0.052	0.560	-0.126	0.153	-0.092	0.298	-0.062	0.487	-0.137	0.119	0.008	0.932	0.147	0.096	0.101	0.253	0.049	0.578	0.073	0.406	-0.005	0.951	0.047	0.599	-0.017	0.847	0.033	0.713
Gastric emptying rate (%)	0.610	0.489	-0.083	0.350	-0.067	0.448	-0.018	0.836	-0.121	0.170	0.124	0.160	0.061	0.493	0.122	0.168	0.174	0.048	0.091	0.304	-0.046	0.606	0.183	0.038	-0.037	0.673	-0.036	0.685

Amplitude of antral contractions (%)	-0.019	0.834	-0.038	0.666	0.099	0.261	-0.065	0.460	-0.043	0.630	-0.106	0.229	-0.022	0.802	0.064	0.467	-0.066	0.453	-0.101	0.255	0.141	0.110	-0.062	0.483	-0.033	0.712	-0.050	0.575
Antral motility index	-0.019	0.827	-0.076	0.388	0.043	0.629	-0.064	0.466	-0.090	0.308	-0.076	0.391	0.024	0.784	-0.023	0.799	-0.031	0.725	-0.073	0.409	0.126	0.153	-0.028	0.752	-0.036	0.687	-0.040	0.655

BMI: Body Mass Index; HbA1c: Glycated hemoglobin; HDL: High-density Lipoproteins; LDL: Low-density Lipoproteins; *r*: Spearman's rank correlation coefficient; SGOT: Aspartate Transaminase; SGPT: Alanine Transaminase; VLDL: Very Low-density Lipoproteins

Supplementary Table 5 Correlation between gastric motility parameters, adiposity, and metabolic indicators in female participants

Parameter	Age (Years)		BMI (kg/m ²)		Body fat %		Waist circumference (cm)		Hip circumference (cm)		Waist/Hip ratio		HbA1c (%)		Total cholesterol (mg/dL)		Triglycerides (mg/dL)		LDL (mg/dL)		HDL (mg/dL)		Cholesterol/HDL ratio		VLDL (mg/dL)		SGOT (U/L)		SGPT (U/L)	
	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>	<i>r</i>	<i>P</i>
Fasting antral area (cm ²)	0.399	<0.001	0.181	0.117	0.106	0.364	0.209	0.069	0.080	0.492	0.144	0.214	0.087	0.456	-0.070	0.550	0.107	0.356	-0.034	0.772	-0.187	0.106	0.141	0.223	0.109	0.349	0.012	0.918	0.065	0.578
Antral area in 1 min (cm ²)	0.269	0.019	0.197	0.088	0.100	0.390	0.141	0.225	0.126	0.277	0.111	0.338	0.148	0.202	0.100	0.388	0.333	0.003	0.081	0.489	-0.191	0.099	0.227	0.049	0.337	0.003	0.067	0.568	0.169	0.145
Antral area in 15 min (cm ²)	0.258	0.024	0.284	0.013	0.114	0.325	0.082	0.480	0.229	0.047	-0.119	0.305	0.024	0.834	0.031	0.791	0.086	0.461	0.027	0.818	-0.113	0.332	0.097	0.407	0.083	0.478	0.073	0.531	0.119	0.306
Frequency of antral contractions (3 min)	-0.141	0.224	-0.234	0.042	-0.160	0.168	-0.216	0.061	-0.247	0.032	-0.048	0.680	0.129	0.266	0.197	0.087	0.044	0.705	0.220	0.057	0.008	0.946	0.090	0.441	0.042	0.722	0.069	0.553	0.035	0.763
Gastric emptying rate (%)	-0.050	0.668	-0.134	0.247	-0.073	0.531	-0.011	0.928	-0.115	0.324	0.144	0.214	0.106	0.362	0.053	0.651	0.176	0.128	0.041	0.725	-0.078	0.504	0.132	0.256	0.185	0.110	-0.018	0.876	-0.006	0.960

Amplitude of antral contractions (%)	
-0.124	
0.286	
-0.043	
0.709	
0.071	
0.544	
0.039	
0.739	
0.018	
0.879	
-0.021	
0.860	
-0.052	
0.656	
-0.027	
0.819	
-0.047	
0.686	
-0.030	
0.795	
0.062	
0.596	
-0.093	
0.426	
-0.046	
0.692	
0.006	
0.957	
0.047	
0.685	
Antral motility index	
-0.151	
0.194	
-0.101	
0.387	
0.024	
0.837	
-0.024	
0.839	
-0.052	
0.657	
-0.036	
0.755	
-0.035	
0.766	
0.030	
0.796	
-0.021	
0.855	
0.024	
0.840	
0.077	
0.508	
-0.073	
0.531	
-0.022	
0.848	
0.014	
0.908	
0.034	
0.774	

BMI: Body Mass Index; HbA1c: Glycated hemoglobin; HDL: High-density lipoproteins; LDL: Low-density lipoproteins; *r*: Spearman rank correlation coefficient; SGOT: Aspartate transaminase; SGPT: Alanine transaminase; VLDL: Very Low-density lipoproteins