Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Table S1 *In vitro* amylase inhibition effect of EGCG in comparison with some other phenolics in the literature

Phenolics	IC50 (μM)	Ref.
Acarbose	23.2	19
Tannic acid	140	19
Luteolin	170	19
EGCG	0.076	In our work
EGCG	0.024	18
Ferulic acid	≥5000	19

Table S2 Changes of body weight, length and Lee's index after 30 days feeding of a obese mice supplemented with 50 mg EGCG /kg-mouse

Group	Body weight (mg)	Body length (cm)	Lee's Index
Normal control	4.90±1.11	0.77±0.28	0.27±0.13
Obese	12.92±1.10**	0.47±0.22	0.82±0.11*
EGCG-treated	8.02±1.00 *	0.36±0.22	0.51±0.07 *

* < 0.05; ** < 0.001 (analysis of variance).

Table S3 Change of TC, TG, HDL-C, FFA and glucose levels after 30 days feeding of a obese mice supplemented with 50 mg EGCG /kg-mouse

Group	TC (mg/mL)	TG (mg/mL)	HDL-C (mg/mL)	FFA (mg/mL)	Glucose (mg/mL)
Normal control	2.74±0.29	0.85±0.09	1.82±0.48	203.12±96.46	10.38±1.18
Obese	4.21±0.47**	0.88±0.12	1.49±0.15	223.14±107.65	14.62±2.16
EGCG-treated	3.60±0.22*	0.83±0.13	2.02±0.49	117.02±60.69	12.59±1.78

** < 0.001; *< 0.05; analysis of variance

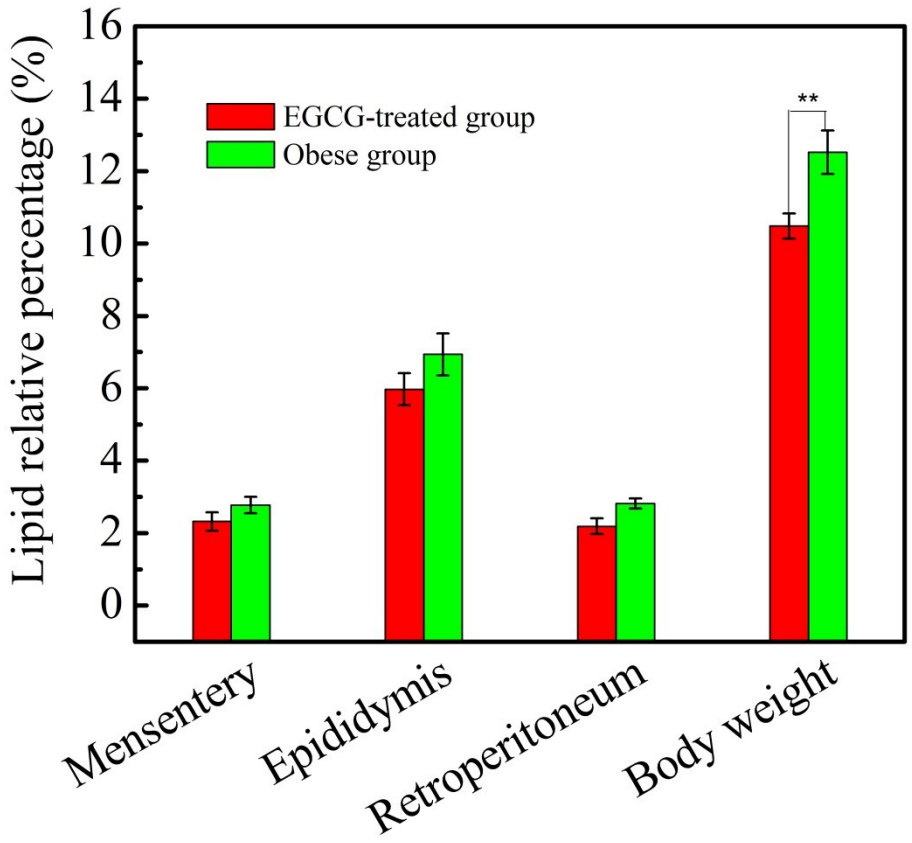

Fig.S1 The lipid relative percentage in organs and total body weight of obese mice after 30 days EGCG 50 mg/kg-mouse supplementation (** $p<0.05$)

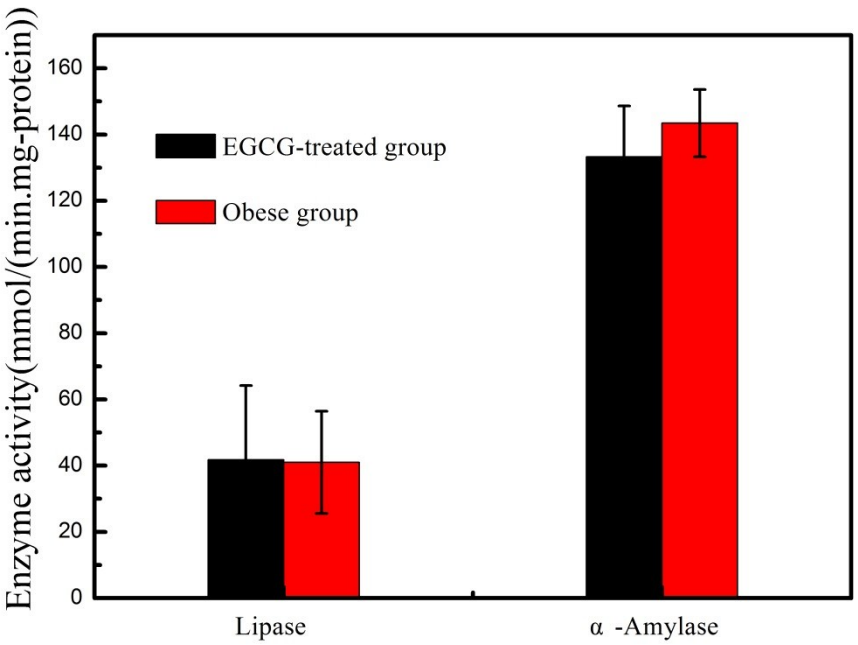

Fig.S2 Enyzme activity of lipase and amylase in serum of obese mice after 30 days EGCG 50 mg/kg-mouse supplementation.