

ESI-Table 1 The weights and lipids levels in plasma of normal rats and obesity rats

Index	Normal group	Obesity
Total glycerides (mmol/L)	0.92±0.23	1.09±0.36
Total Cholesterol (mmol/L)	3.11±0.49	4.62±0.55***
HDL-C (mmol/L)	2.24±0.61	1.27±0.42*
LDL-C (mmol/L)	1.88±0.31	2.33±0.07**
Weight (g)	395.04±15.09	471.83±33.89***

*p<0.05, **p<0.01 and ***p<0.001 compared with normal group.

ESI-Table 2 The weight of main organs of obesity and normal rats

Index	Normal rats	Obesity rats
Stomach	1.43±0.33	1.69±0.24
Small intestine	4.76±0.96	4.49±0.92
Colon	0.82±0.18	0.70±0.13

ESI-Table 3 Calibration curve and linear range of the seven catechins in stomach

Analytes	Calibration curve	r	Linear range (ng/mL)
EC	$y=0.0015x+0.0005$	0.9984	10-10000
EGC	$y=0.0016x-0.0006$	0.9994	10-10000
ECG	$y=0.0068x+0.0051$	0.9979	10-10000
EGCG	$y=0.0021x+0.0192$	0.9991	50-20000
C	$y=0.0011x+0.0028$	0.9981	10-5000
GC	$y=0.0018x+0.0022$	0.9964	10-5000
GCG	$y=0.0050x+0.0037$	0.9993	10-5000

ESI-Table 4 Calibration curve and linear range of the seven catechins in small intestine

Analytes	Calibration curve	r	Linear range (ng/mL)
EC	$y=0.0010x-0.0003$	0.9989	10-10000
EGC	$y=0.0010x-0.0023$	0.9987	10-10000
ECG	$y=0.0029x+0.0004$	0.9993	10-10000
EGCG	$y=0.0019x+0.0027$	0.9988	50-20000
C	$y=0.0008x-0.0011$	0.9993	10-5000
GC	$y=0.0008x-0.0005$	0.9984	10-5000
GCG	$y=0.0023x+0.0001$	0.9975	10-5000

ESI-Table 5 Calibration curve and linear range of the seven catechins in colon

Analytes	Calibration curve	r	Linear range (ng/mL)
EC	$y=0.0025x-0.0016$	0.9981	10-10000
EGC	$y=0.0023x-0.0022$	0.9991	10-10000
ECG	$y=0.0071x+0.0130$	0.9984	10-10000
EGCG	$y=0.0040x+0.0092$	0.9989	50-20000
C	$y=0.0018x-0.0012$	0.9965	5-5000
GC	$y=0.0024x+0.0031$	0.9992	5-5000
GCG	$y=0.0052x-0.0033$	0.9969	5-5000

Supplementary Figure Captions

ESI-Fig. 1 Time-dependent changes of catechins in circulation solution of stomach of normal ad obesity rats given tea polyphenols solution (350mg/kg)

*p<0.05, **p<0.01 compared with normal rats.

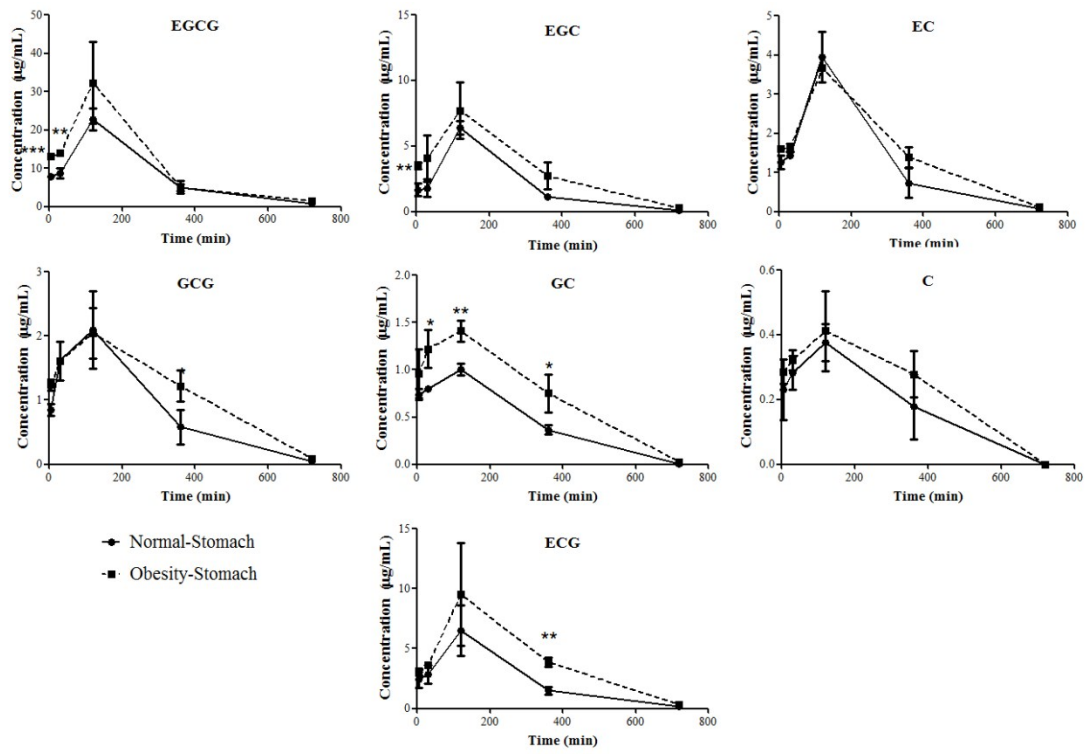
ESI-Fig. 2 Time-dependent changes of catechins in circulation solution of small intestine of normal ad obesity rats given tea polyphenols solution (350 mg/kg)

*p<0.05, **p<0.01, ***p<0.001 compared with normal rats.

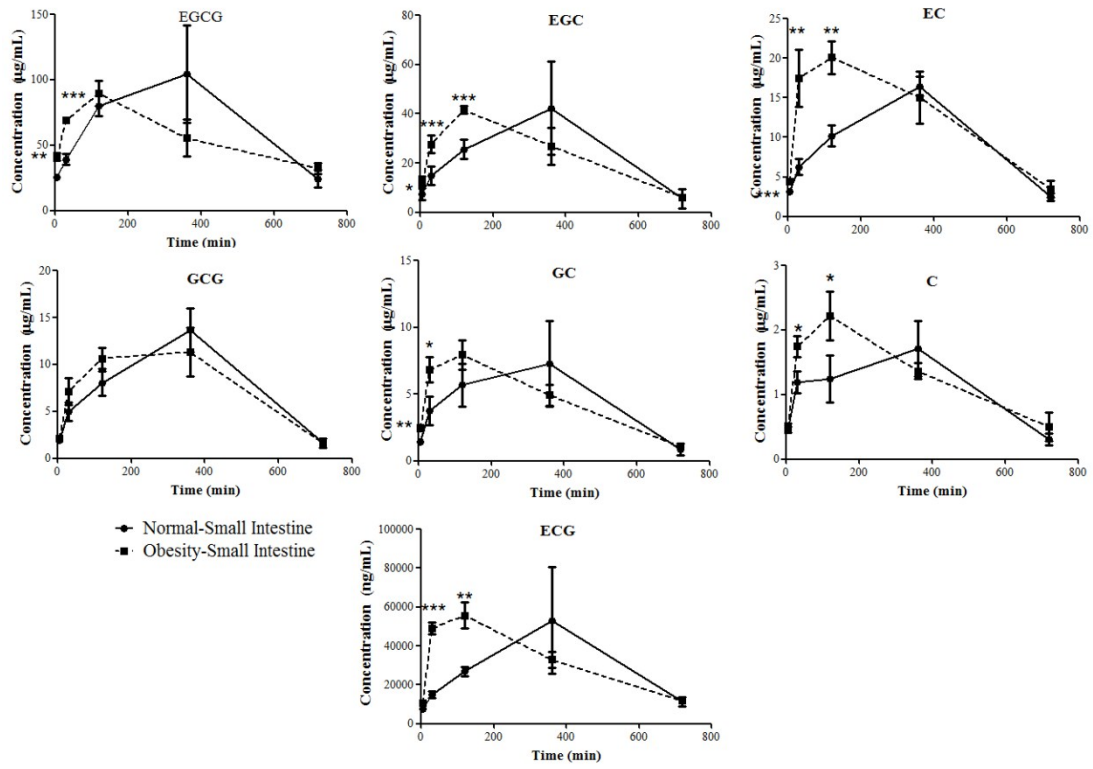
ESI-Fig. 3 Time-dependent changes of catechins in circulation solution of colon of normal ad obesity rats given tea polyphenols solution (350 mg/kg)

*p<0.05 compared with normal rats.

ESI-Fig. 1



ESI-Fig. 2



ESI-Fig. 3

