

Supplementary material

Figure captions

Figure S1. Chromatograms obtained from the three tea infusions, using UPLC-Q-TOF-MS/MS in negative ion and positive ion mode. (A): green tea infusion in negative ion mode; (B): green tea infusion in positive ion mode; (C): oolong tea infusion in negative ion mode; (D): Green tea infusion in positive ion mode; (E): black tea infusion in negative ion mode; (F): black tea infusion in positive ion mode.

Figure S2. Relative abundances of the different phyla in each of the mice.

Table S1. The composition of low-fat diet and high-fat diet

	Low-fat diet (10% Fat)	High-fat diet (45% Fat)
Energy Composition	100	100
Protein (%)	20	20
Carbohydrate (%)	70	35
Fat (%)	10	45
Composition of fatty acid	100	100
Saturated (%)	28.7	40.3
Monounsaturated (%)	32.7	40.4
Polyunsaturated (%)	38.6	19.3
Type of fat (g)		
Lard (g)	20	177.5
Soybean Oil (g)	25	25

Table S2. The taxonomic information of the 30 key phlotypes.

	Phylum	Class	Order	Family	Genus
OTU220	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Rikenellaceae</i>	<i>Alistipes</i>
OTU402	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU287	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Rikenellaceae</i>	<i>Alistipes</i>
OTU417	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU173	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Lachnospiraceae</i>	<i>uncultured</i>
OTU45	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Lachnospiraceae</i>	<i>uncultured</i>
OTU224	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU447	<i>Verrucomicrobia</i>	<i>Verrucomicrobiae</i>	<i>Verrucomicrobiales</i>	<i>Verrucomicrobiaceae</i>	<i>Akkermansia</i>
OTU431	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Lachnospiraceae</i>	<i>Blautia</i>
OTU435	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Ruminococcaceae</i>	<i>Ruminococcus</i>
OTU477	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Rikenellaceae</i>	<i>Rikenella</i>
OTU71	<i>Firmicutes</i>	<i>Erysipelotrichia</i>	<i>Erysipelotrichales</i>	<i>Erysipelotrichaceae</i>	<i>Allobaculum</i>
OTU340	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU383	<i>Firmicutes</i>	<i>Erysipelotrichia</i>	<i>Erysipelotrichales</i>	<i>Erysipelotrichaceae</i>	<i>Allobaculum</i>
OTU104	<i>Proteobacteria</i>	<i>Epsilonproteobacteria</i>	<i>Campylobacterales</i>	<i>Helicobacteraceae</i>	<i>Helicobacter</i>
OTU278	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Bacteroidaceae</i>	<i>Bacteroides</i>
OTU319	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU192	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU88	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU418	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Lachnospiraceae</i>	
OTU535	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU407	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Rikenellaceae</i>	<i>Alistipes</i>
OTU450	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Ruminococcaceae</i>	<i>uncultured</i>
OTU372	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>Porphyromonadaceae</i>	<i>Parabacteroides</i>
OTU527	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Ruminococcaceae</i>	<i>uncultured</i>
OTU189	<i>Bacteroidetes</i>	<i>Bacteroidia</i>	<i>Bacteroidales</i>	<i>S24-7</i>	<i>norank</i>
OTU75	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Lachnospiraceae</i>	<i>Blautia</i>
OTU515	<i>Proteobacteria</i>	<i>Epsilonproteobacteria</i>	<i>Campylobacterales</i>	<i>Helicobacteraceae</i>	<i>Helicobacter</i>
OTU425	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Ruminococcaceae</i>	<i>Oscillibacter</i>
OTU426	<i>Firmicutes</i>	<i>Clostridia</i>	<i>Clostridiales</i>	<i>Ruminococcaceae</i>	<i>Anaerotruncus</i>

Figure S1.



