

Supplemental Table 1 *Composition of diets fed to mice*

<i>Ingredient</i>	<i>MD10% Fat</i>	<i>MD45% Fat</i>
<i>Casein</i>	<i>18.96</i>	<i>23.31</i>
<i>L-cystein</i>	<i>0.28</i>	<i>0.35</i>
<i>Corn starch</i>	<i>29.86</i>	<i>8.48</i>
<i>Maltodextrin</i>	<i>3.32</i>	<i>11.65</i>
<i>Sucrose</i>	<i>33.17</i>	<i>20.14</i>
<i>Cellulose</i>	<i>4.74</i>	<i>5.83</i>
<i>Soybean oil</i>	<i>2.37</i>	<i>2.91</i>
<i>Lard</i>	<i>1.9</i>	<i>20.68</i>
<i>Mineral Mix</i>	<i>0.95</i>	<i>1.16</i>
<i>Phosphate dicalcium</i>	<i>1.23</i>	<i>1.51</i>
<i>Carbonate calcium</i>	<i>0.5</i>	<i>0.64</i>
<i>Potassium citrate, 1 H₂O</i>	<i>1.56</i>	<i>1.92</i>
<i>Vitamin Mix</i>	<i>0.95</i>	<i>1.16</i>
<i>Choline bitartrate</i>	<i>0.19</i>	<i>0.23</i>
<i>Total</i>	<i>99.98</i>	<i>99.97</i>
<i>Energy Composition</i>	<i>100</i>	<i>100</i>
<i>Protein</i>	<i>20</i>	<i>20</i>
<i>Carbohydrate</i>	<i>70</i>	<i>35</i>
<i>Fat</i>	<i>10</i>	<i>45</i>

Supplemental Table 2 Sequence of primers used in quantitative real-time PCR

<i>Gene</i>	<i>Sense primer</i>	<i>Antisense primer</i>
<i>TNFα</i>	AGCCACGTCGTAGCAAACCAC	ACACCCATTCCCTTCACAGAGC
<i>IL-6</i>	TCCAGTTGCCTTCTTGGGAC	GGTCTGTTGGGAGTGGTATCC
<i>IFN-γ</i>	AGCAAGGCGAAAAAGGATGC	TCATTGAATGCTTGGCGCTG
<i>NF-κB</i>	CCCTACGGAACTGGGCAAAT	GCGGAATCGAAATCCCCTCT
<i>iNOS</i>	AAGATGGCCTGGAGGAATGC	TGCTGTGCTACAGTTCCGAG
<i>β-actin</i>	ATGTGGATCAGCAAGCAGGA	AAGGGTGTAACGACAGCTCA

Supplemental Table 3 Fecal fatty acid composition and content of male C57BL/6 mice ($\mu\text{L/g}$)

Item	Total fecal acid
HFD	5.353 $\pm$ 0.122 ^a
BRA	7.922 $\pm$ 0.250 ^b
BSA	13.495 $\pm$ 0.203 ^c
PCA	6.354 $\pm$ 0.425 ^{ab}
OL	15.104 $\pm$ 0.632 ^d
NC	19.519 $\pm$ 0.571 ^e

Values are expressed as mean $\pm$ SD. The means marked with different letters are significantly differences compared with the other groups ($p < 0.05$). NC, low-fat diet control; HFD, high-fat diet control; OL, high-fat diet plus Orlistat at 100 mg/kg; BRA, high-fat diet plus black rice anthocyanin at 200 mg/kg; BSA, high-fat diet plus black soybean anthocyanin at 200 mg/kg; PCA, high-fat diet plus purple corn anthocyanin at 200 mg/kg. The means marked with superscript letters are significantly different relative to others.