

**Supplementary Table 1. Composition of experimental diet**

|                     | <b>Normal diet (g%)</b> | <b>High fat diet (g%)</b> |
|---------------------|-------------------------|---------------------------|
| <b>Carbohydrate</b> | <b>63</b>               | <b>40</b>                 |
| <b>Protein</b>      | <b>20</b>               | <b>23</b>                 |
| <b>Fat</b>          | <b>7</b>                | <b>24</b>                 |
| <b>Ingredient</b>   |                         |                           |
| Casein              | 200                     | 200                       |
| Sucrose             | 100                     | 172.8                     |
| Dextrose            | 132                     | 100                       |
| Corn starch         | 397.5                   | 72.8                      |
| Cellulose           | 50                      | 50                        |
| Soybean oil         | 70                      | 25                        |
| Lard                | 0                       | 177.5                     |
| Mineral mixture     | 35                      | 45                        |
| Vitamin mixture     | 10                      | 10                        |
| L-cystine           | 3                       | 3                         |
| Choline bitartrate  | 2.5                     | 2                         |
| <b>Total</b>        | <b>1000</b>             | <b>858.1</b>              |

**Supplementary Table. 2. Effects of SBP extracts on Glucose, Insulin and HOMA-IR level in mice with high-fat diet-induced obesity**

|                 | <b>Glucose<br/>(mg/dL)</b>         | <b>Insulin<br/>(<math>\mu</math>IU/mL)</b> | <b>HOMA-IR<sup>1)</sup></b>       |
|-----------------|------------------------------------|--|-----------------------------------|
| <b>NC</b>       | <b>124.50<math>\pm</math>8.68*</b> | <b>14.93<math>\pm</math>1.04*</b>          | <b>4.66<math>\pm</math>0.63*</b>  |
| <b>HFD</b>      | <b>280.80<math>\pm</math>29.25</b> | <b>93.36<math>\pm</math>12.35</b>          | <b>79.73<math>\pm</math>22.06</b> |
| <b>Orlistat</b> | <b>191.33<math>\pm</math>29.01</b> | <b>36.38<math>\pm</math>2.12*</b>          | <b>16.96<math>\pm</math>1.85*</b> |
| <b>SB100</b>    | <b>246.00<math>\pm</math>7.13</b>  | <b>29.67<math>\pm</math>0.42*</b>          | <b>17.14<math>\pm</math>1.14*</b> |
| <b>SB200</b>    | <b>213.75<math>\pm</math>10.59</b> | <b>28.46<math>\pm</math>3.71*</b>          | <b>15.17<math>\pm</math>1.98*</b> |
| <b>SBP100</b>   | <b>215.33<math>\pm</math>16.84</b> | <b>29.01<math>\pm</math>1.96*</b>          | <b>15.40<math>\pm</math>1.47*</b> |
| <b>SBP200</b>   | <b>188.40<math>\pm</math>30.01</b> | <b>20.75<math>\pm</math>3.53*</b>          | <b>10.35<math>\pm</math>2.70*</b> |

Data are expressed as means  $\pm$  SEM. \* $p$  < 0.05 compared with the HFD-treatment group.

<sup>1)</sup>HOMA-IR (homeostasis model assessment of insulin resistance) = fasting glucose (mg/dL)  $\times$  fasting insulin ( $\mu$ IU/mL)  $\div$  405