**Supplementary information**

**Figure S1**

**Dose dependent and strain-dependent anti-obesity effects of *Lactobacillus sakei* in a diet induced obese murine model**

Yosep Ji1\*, Young Mee Chung2\*, Soyoung Park1\*, Dahye Jeong2, Bongjoon Kim2, Wilhelm H. Holzapfel1

1Department of Advanced Green Energy and Environment, Handong Global University, Pohang, Gyungbuk 37554, South Korea;

2Beneficial microbes center, CJ Foods R&D, CJ CheilJedang Corporation, Suwon-si, SouthKorea



**Supplementary Figure S1.** Reduced weight gain effect of different microorganisms administered in a diet induced obesity mouse model after 8 weeks study period. After 1 week of acclimatization, 120 of 6 weeks old male C57/BL6 mice were divided into 12 different groups receiving a low-fat diet with 300 μL PBS as carrier (LFD), high-fat diet with 300 μL PBS (HFD), high-fat diet with 80 mpk of orlistat. The other 9 groups received a high-fat diet with 1x109 CFU of either *Lactobacillus plantarum* 301 (LP 301), *L. sakei* CJLS03 (LS 03), *L. sakei* LS 338, *L. sakei* LS 446, *L. brevis* LB 29, *L. brevis* LB 33, *L. brevis* LB 54, *L. brevis* LB 55 or *B. longum* BL 83. Feed and sterilized water supply were provided *ad libitum* and weight gains were measured by subtracting the average weight of week 0 from that of week 8. Asterisks denote the level of significance (Dunnett’s multiple comparison test) compared to HFD as \*: p<0.05, \*\*: p<0.01 and \*\*\*: p<0.001.