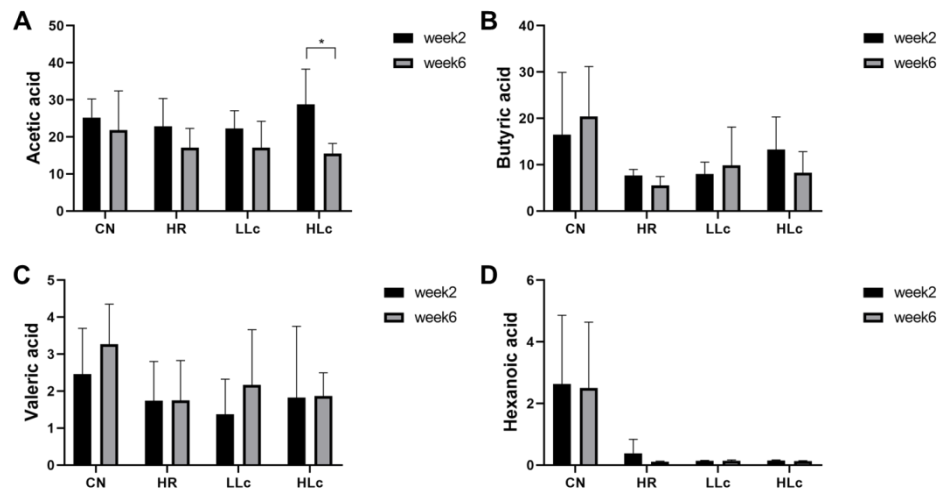


**Table S1.** Nutrient composition of maintenance feed for experimental rats (g/kg).

| Moisture      | ≤100 | Calcium                  | 10–18       |
|---------------|------|--------------------------|-------------|
| Crude protein | ≥180 | total phosphorus         | 6–12        |
| Crude fat     | ≥40  | Calcium/total phosphorus | 1.2:1–1.7:1 |
| Crude fiber   | ≤50  | Lysine                   | ≥8.2        |
| Crude ash     | ≤80  | Methionine + cystine     | ≥5.3        |

The main raw materials are composed of: (1) Protein source: American chicken meal, Peruvian fish meal, soybean meal; (2) Fat source: vegetable oil; (3) Fiber source: bran; (4) Carbohydrate: corn, flour; (5) Vitamins: vitamins A, D, E, B and other complex vitamins; (6) Minerals: complex trace elements, calcium hydrogen phosphate, stone powder.



**Figure S1.** Comparison of short-chain fatty acid content between week 2 and week 6. (A), acetic acid; (B), butyric acid; (C), valeric acid; (D), hexanoic acid. \* indicates  $p < 0.05$ . N = 4 in week 2 and N = 9 in week 6. CN: control group, HR: isoniazid + rifampicin model group, LLc: HR + low dose *L. casei* ATCC334 group, HLc: HR + high dose *L. casei* ATCC334 group.