

## SUPPLEMENTARY DATA

Table S1. Summary of the MiSeq data and the diversity indices

| Samples    | Valid reads | OTUs | Shannon | ACE              | Chao1            |
|------------|-------------|------|---------|------------------|------------------|
| C-Jejunum1 | 32856       | 379  | 2.97    | 460<br>(433,501) | 460<br>(427,515) |
| C-Jejunum2 | 30277       | 400  | 3.01    | 461<br>(439,494) | 463<br>(436,510) |
| C-Jejunum3 | 40872       | 406  | 2.73    | 514<br>(480,564) | 501<br>(465,560) |
| A-Jejunum1 | 33541       | 439  | 3.56    | 527<br>(498,571) | 511<br>(483,559) |
| A-Jejunum2 | 30402       | 396  | 3.63    | 467<br>(442,506) | 459<br>(432,505) |
| A-Jejunum3 | 35586       | 389  | 3.56    | 438<br>(420,469) | 451<br>(423,502) |
| C-Ileum1   | 30088       | 536  | 4.08    | 603<br>(580,636) | 616<br>(584,668) |
| C-Ileum2   | 41783       | 174  | 0.82    | 397<br>(341,473) | 266<br>(226,335) |
| C-Ileum3   | 37636       | 324  | 2.2     | 421<br>(387,471) | 436<br>(390,514) |
| A-Ileum1   | 42481       | 427  | 3.77    | 477<br>(459,508) | 485<br>(459,532) |
| A-Ileum2   | 36678       | 260  | 1.12    | 359<br>(325,413) | 363<br>(320,437) |
| A-Ileum3   | 37998       | 329  | 3.38    | 376<br>(357,406) | 383<br>(358,431) |
| C-Cecum1   | 29635       | 223  | 1.4     | 290<br>(264,331) | 277<br>(252,322) |
| C-Cecum2   | 33334       | 300  | 2.95    | 397<br>(363,451) | 394<br>(354,463) |
| C-Cecum3   | 29705       | 471  | 3.62    | 568              | 566              |

|          |       |     |      |           |           |
|----------|-------|-----|------|-----------|-----------|
|          |       |     |      | (537,613) | (530,625) |
| A-Cecum1 | 27384 | 379 | 3.72 | 432       | 441       |
|          |       |     |      | (412,465) | (413,492) |
| A-Cecum2 | 33235 | 370 | 2.97 | 437       | 434       |
|          |       |     |      | (413,474) | (407,481) |
| A-Cecum3 | 34161 | 377 | 3.59 | 434       | 444       |
|          |       |     |      | (413,469) | (414,499) |
| C-Colon1 | 31342 | 382 | 3.82 | 467       | 490       |
|          |       |     |      | (447,500) | (455,554) |
| C-Colon2 | 26642 | 413 | 3.54 | 432       | 444       |
|          |       |     |      | (413,463) | (416,497) |
| C-Colon3 | 34507 | 387 | 4.34 | 442       | 466       |
|          |       |     |      | (424,471) | (434,525) |
| A-Colon1 | 27359 | 411 | 3.82 | 467       | 490       |
|          |       |     |      | (447,500) | (455,554) |
| A-Colon2 | 35124 | 383 | 3.54 | 432       | 444       |
|          |       |     |      | (413,463) | (416,497) |
| A-Colon3 | 25897 | 397 | 4.34 | 442       | 466       |
|          |       |     |      | (424,471) | (434,525) |

OTUs, operational taxonomic units (97% identity); ACE, abundance-based coverage estimator; C-, control group; A-, antibiotics group.

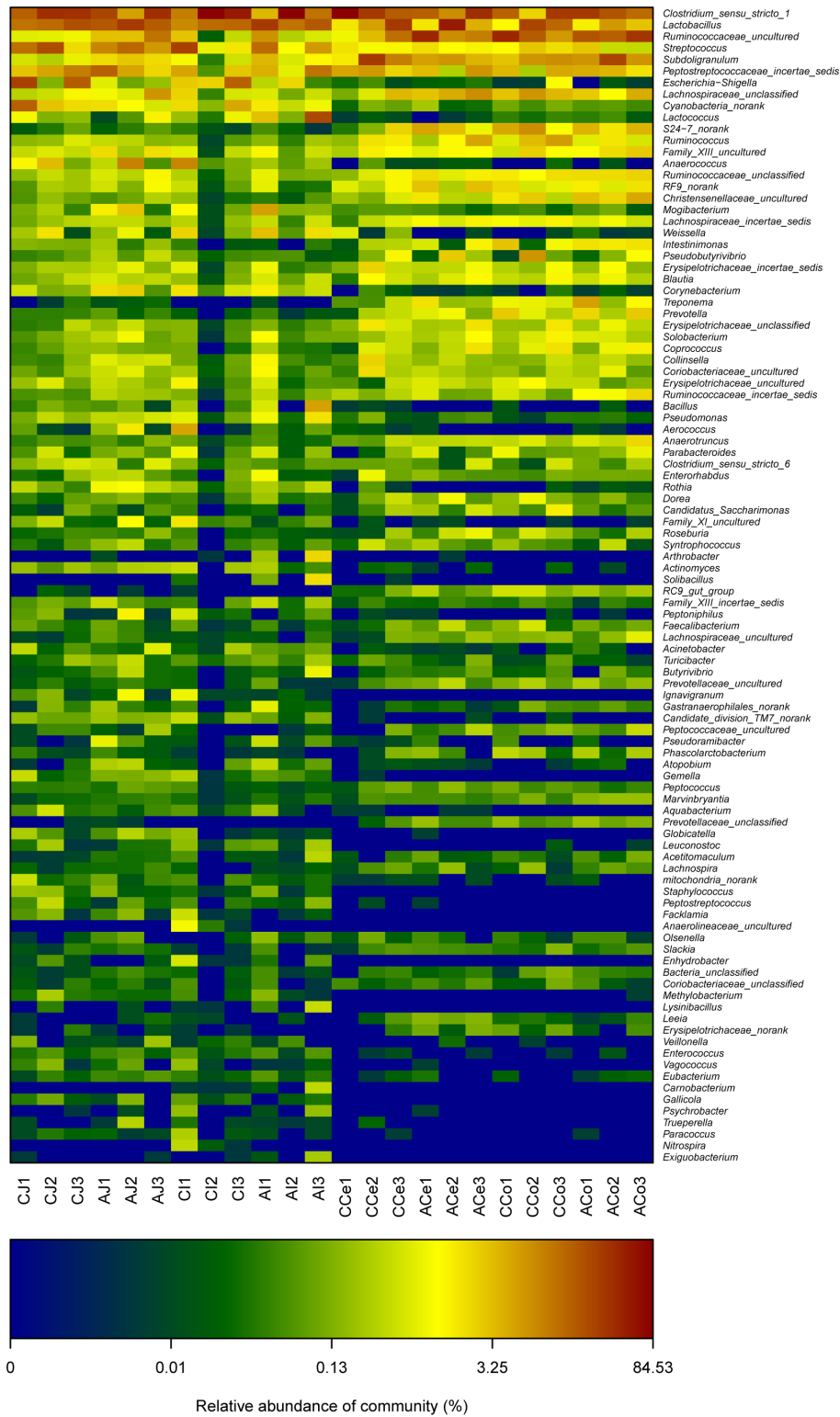


Figure S1. The heat map showing different abundances of genera between the control and antibiotic groups. The relative levels of abundance are depicted visually from blue to red; blue represents the lowest abundance (min = 0%), whereas red represents the highest level of abundance. Each column represents samples, and each row corresponds to a genus.

# PCA

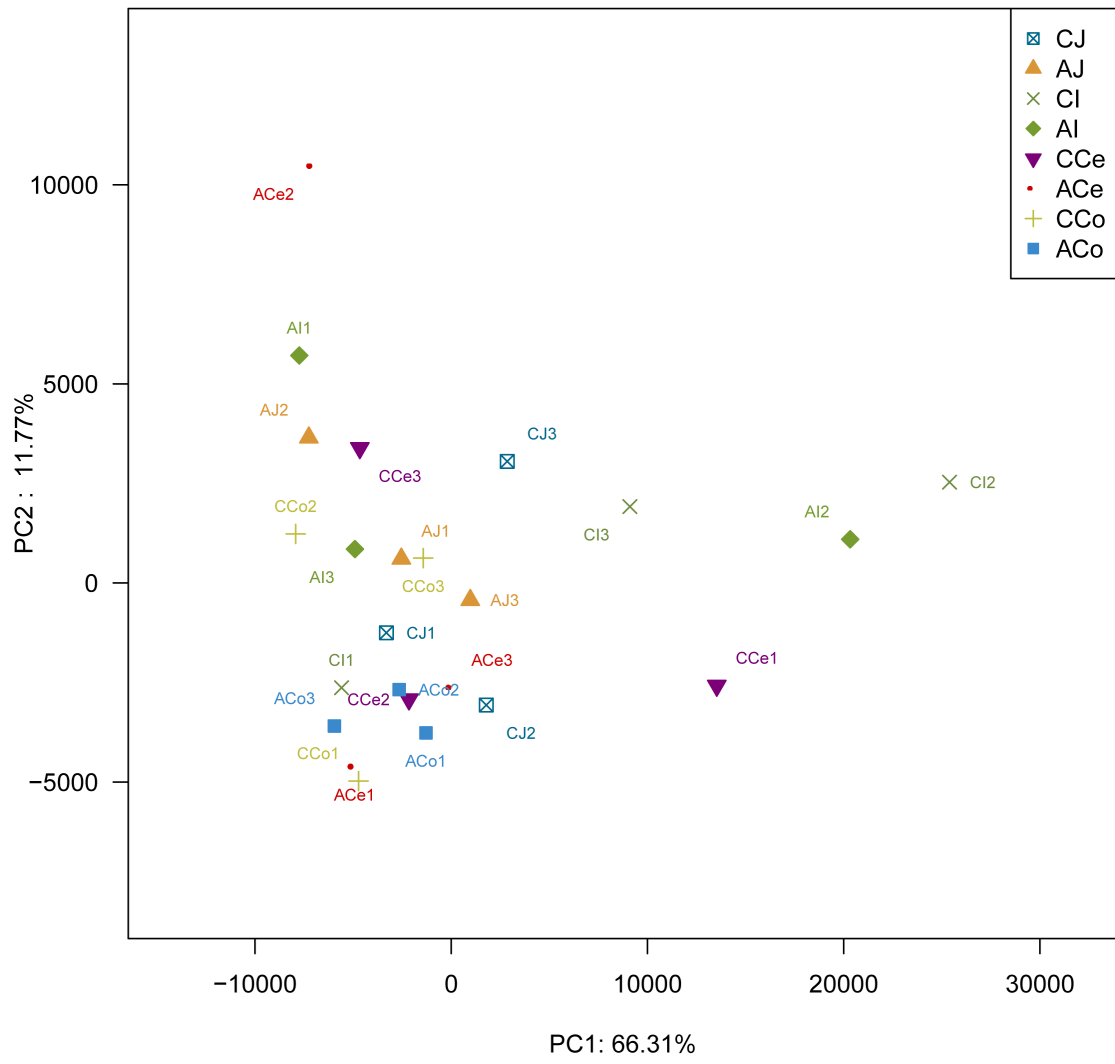


Figure S2. PCA(Principal Component Analysis) of 24 samples

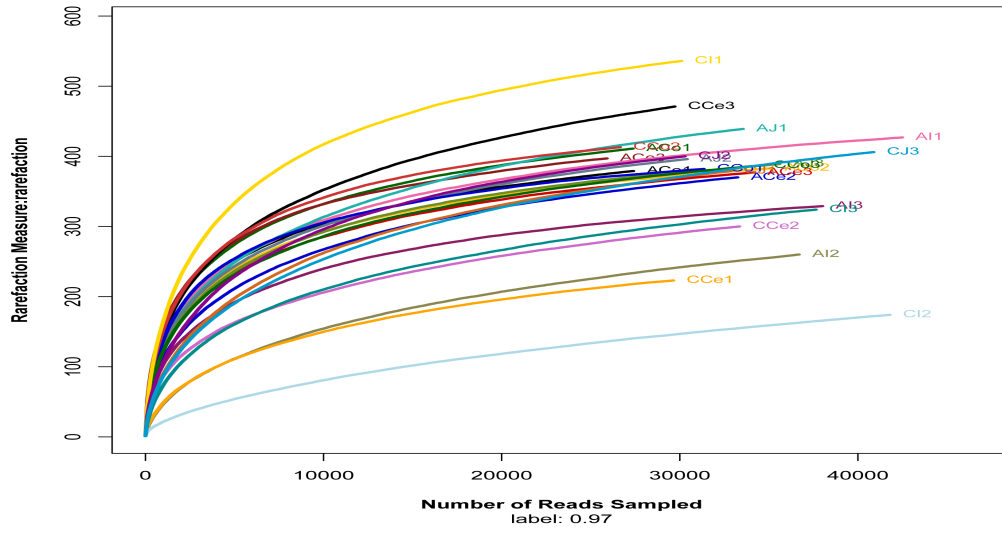


Figure S3. Rarefaction analysis of 24 samples