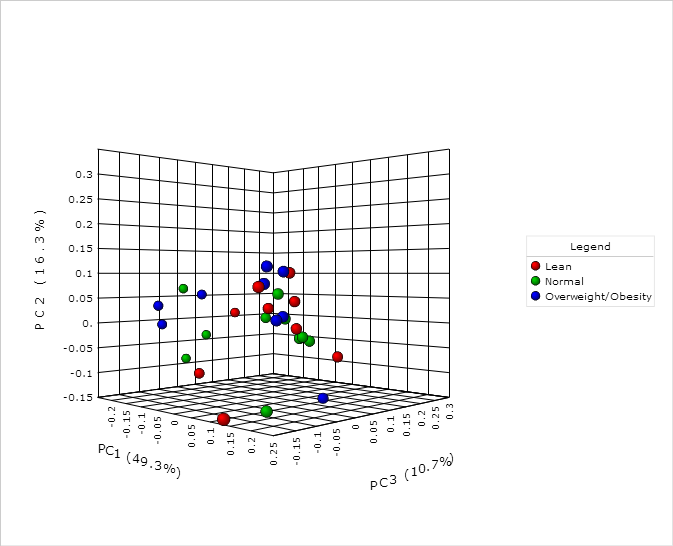
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table S1. Raw data before and after standard quality control (QC) filters.** | | | | | |
| **Sample ID** | **Reads** | **Bases** | **Paired End Reads** | **Post QC**  **Sequences** | **Post QC**  **Mean Length** |
| L1 | 281710 | 84794710 | 140855 | 103473 | 454.64 |
| L2 | 247116 | 74381916 | 123558 | 101931 | 454.06 |
| L3 | 250318 | 75345718 | 125159 | 101203 | 452.04 |
| L4 | 274438 | 82605838 | 137219 | 107348 | 453.63 |
| L6 | 240516 | 72395316 | 120258 | 92697 | 455.23 |
| L7 | 259144 | 78002344 | 129572 | 99681 | 450.87 |
| L8 | 264204 | 79525404 | 132102 | 95270 | 455.08 |
| L9 | 440768 | 132671168 | 220384 | 155654 | 456.17 |
| L10 | 412840 | 124264840 | 206420 | 148954 | 453.07 |
| N2 | 377040 | 113489040 | 188520 | 145534 | 453.33 |
| N3 | 367228 | 110535628 | 183614 | 148897 | 455.45 |
| N4 | 416144 | 125259344 | 208072 | 162650 | 454.81 |
| N5 | 460426 | 138588226 | 230213 | 153685 | 454.61 |
| N7 | 481376 | 144894176 | 240688 | 191280 | 455.93 |
| N9 | 129292 | 38916892 | 64646 | 51311 | 451.75 |
| N10 | 138594 | 41716794 | 69297 | 51881 | 456.92 |
| N11 | 137688 | 41444088 | 68844 | 50985 | 456.47 |
| N12 | 138142 | 41580742 | 69071 | 57901 | 453.96 |
| N13 | 144560 | 43512560 | 72280 | 54202 | 453.13 |
| O1 | 147820 | 44493820 | 73910 | 56389 | 456.28 |
| O2 | 186966 | 56276766 | 93483 | 70179 | 451.33 |
| O3 | 126816 | 38171616 | 63408 | 46403 | 455.62 |
| O4 | 131106 | 39462906 | 65553 | 53250 | 454.64 |
| O5 | 127140 | 38269140 | 63570 | 45012 | 455.76 |
| O6 | 98490 | 29645490 | 49245 | 30409 | 456.06 |
| O8 | 99438 | 29930838 | 49719 | 37916 | 454.98 |
| O9 | 119280 | 35903280 | 59640 | 52428 | 456.35 |
| O10 | 152976 | 46045776 | 76488 | 60209 | 455.64 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table S2. Quantification of Firmicutes and Bacteroidetes by qPCR expressed as log10 copies/g faces** | | | | |
|  | Lean | Normal | Overweight/obesity | P-values |
| Firmicutes a | 11.92±1.87 | 12.77±1.47 | 10.92±3.90 | 0.874 |
| Bacteroidetes a | 15.63±2.46 | 16.70±1.84 | 14.29±5.20 | 0.651 |
| Firmicutes/Bacteroidetes a | 0.7641±0.0323 | 0.7656±0.0408 | 0.7692±0.0374 | 0.844 |
| a：Mean±SD |  |  |  |  |



**Figure S1.** the weighted UniFrac principal coordinates analysis (PCOA)