

Table S1. Pairwise comparison of alpha diversity by Kruskal-Wallis test.

| | Group 1 | Group 2 | H | <i>p</i> -Value | <i>q</i> -Value |
|---------------|------------|------------|-------|-----------------|-----------------|
| Faith PD | Control | Normal ALT | 2.000 | 0.157 | 0.399 |
| | | High ALT | 1.237 | 0.265 | 0.399 |
| | Normal ALT | High ALT | 0.006 | 0.939 | 0.939 |
| Evenness | Control | Normal ALT | 1.392 | 0.238 | 0.238 |
| | | High ALT | 2.052 | 0.152 | 0.228 |
| | Normal ALT | High ALT | 4.380 | 0.036 | 0.109 |
| Shannon | Control | Normal ALT | 1.341 | 0.247 | 0.337 |
| | | High ALT | 0.922 | 0.337 | 0.337 |
| | Normal ALT | High ALT | 2.932 | 0.087 | 0.261 |
| Observed OTUs | Control | Normal ALT | 1.693 | 0.193 | 0.565 |
| | | High ALT | 0.782 | 0.377 | 0.565 |
| | Normal ALT | High ALT | 0.093 | 0.761 | 0.761 |

Table S2. Pairwise comparison of beta diversity by PERMANOVA test.

| | Group 1 | Group 2 | Pseudo-F | <i>p</i> -Value | <i>q</i> -Value |
|--------------------|------------|------------|----------|-----------------|-----------------|
| Unweighted UniFrac | Control | Normal ALT | 0.888 | 0.531 | 0.651 |
| | | High ALT | 0.917 | 0.526 | 0.651 |
| | Normal ALT | High ALT | 0.815 | 0.651 | 0.651 |
| Weighted UniFrac | Control | Normal ALT | 0.676 | 0.596 | 0.596 |
| | | High ALT | 2.815 | 0.041 | 0.062 |
| | Normal ALT | High ALT | 3.648 | 0.013 | 0.039 |

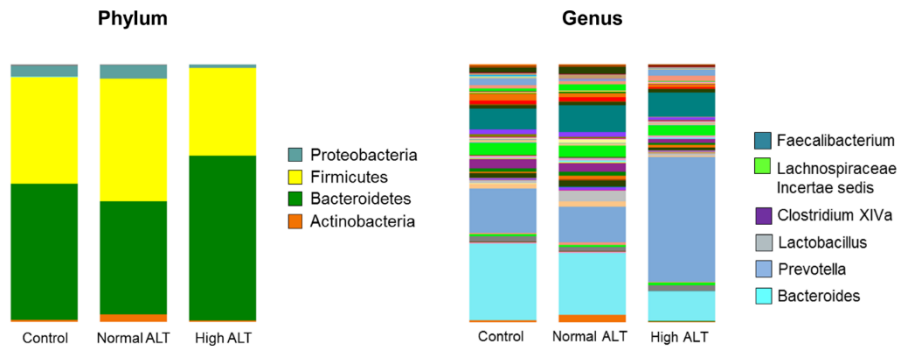


Figure S1. Bar chart of the proportional abundance at phylum and genus levels in three categories.