**Table S2. Quantification of bacterial groups.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Group / *Blastocystis* qPCR result | Subjects | *Enterobacteriaceae* | *Lactobacillus* sp. | *Bacteroïdes* sp. | *Bifidobacterium* sp. |
| **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** |
| IBS-C / *Blastocystis* - | All | 6.625 | 3.106 | 0.147 | 7.612 | 1.268 | 0.061 | 4.907 | 0.824 | **<0.001** | 2.915 | 2.842 | **<0.001** |
| Control group/ *Blastocystis* - | 5.686 | 3.747 | 7.902 | 3.526 | 3.909 | 3.925 | 5.956 | 3.871 |
| IBS-C / *Blastocystis* - | Females | 6.166 | 3.109 | 0.071 | 7.354 | 1.283 | 0.069 | 4.897 | 0.846 | **0.001** | 2.202 | 2.143 | **<0.001** |
| Control group/ *Blastocystis* - | 4.797 | 3.458 | 7.657 | 3.850 | 3.535 | 4.280 | 5.099 | 3.700 |
| IBS-C / *Blastocystis* - | Males | 8.002 | 2.870 | 0.439 | 8.384 | 0.906 | 0.507 | 4.938 | 0.815 | **0.046** | 5.054 | 3.733 | 0.086 |
| Control group/ *Blastocystis* - | 6.885 | 3.873 | 8.233 | 3.100 | 4.414 | 3.430 | 7.113 | 3.886 |
| IBS-C / *Blastocystis* - | All | 6.625 | 3.106 | 0.209 | 7.612 | 1.268 | 0.518 | 4.907 | 0.824 | 0.094 | 2.915 | 2.842 | 0.304 |
| IBS-C / *Blastocystis* + | 5.310 | 1.823 | 8.054 | 1.666 | 5.668 | 1.234 | 2.002 | 1.088 |
| IBS-C / *Blastocystis* - | Females | 6.166 | 3.109 | 0.824 | 7.354 | 1.283 | 0.075 | 4.897 | 0.846 | 0.159 | 2.202 | 2.143 | 0.824 |
| IBS-C / *Blastocystis* + | 5.855 | 2.328 | 8.884 | 1.861 | 5.809 | 1.388 | 2.498 | 1.449 |
| IBS-C / *Blastocystis* - | Males | 8.002 | 2.870 | 0.059 | 8.384 | 0.906 | 0.089 | 4.938 | 0.815 | 0.345 | 5.054 | 3.733 | **0.008** |
| IBS-C / *Blastocystis* + | 4.765 | 1.241 | 7.224 | 1.084 | 5.526 | 1.255 | 1.510 | 0.074 |
| Control / *Blastocystis* + | All | 6.174 | 4.222 | 0.787 | 8.989 | 2.334 | 0.341 | 3.839 | 1.828 | 0.558 | 4.287 | 1.570 | **<0.001** |
| Control / *Blastocystis* - | 5.686 | 3.747 | 7.902 | 3.526 | 3.909 | 3.925 | 5.956 | 3.871 |
| Control / *Blastocystis* + | Females | 4.729 | 2.605 | 0.946 | 7.239 | 2.034 | 0.151 | 4.214 | 2.206 | 0.347 | 4.898 | 1.866 | 0.338 |
| Control / *Blastocystis* - | 4.797 | 3.458 | 7.657 | 3.850 | 3.535 | 4.280 | 5.099 | 3.700 |
| Control / *Blastocystis* + | Males | 7.378 | 4.999 | 0.785 | 10.446 | 1.385 | **0.043** | 3.527 | 1.472 | 0.969 | 3.777 | 1.110 | **<0.001** |
| Control / *Blastocystis* - | 6.885 | 3.873 | 8.233 | 3.100 | 4.414 | 3.430 | 7.113 | 3.886 |
| Group / *Blastocystis* qPCR result | **Subjects** | ***Desulfovibrio* sp.** | ***C. coccoides*** | ***C. leptum***  | ***F. prausnitzii*** |
| **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** | **Mean** | **Sd** | ***p*-value** |
| IBS-C / *Blastocystis* - | All | 6.880 | 1.358 | **0.011** | 6.214 | 3.900 | 0.057 | 3.077 | 4.308 | **0.001** | 6.809 | 2.952 | **0.004** |
| Control / *Blastocystis* - | 8.414 | 3.250 | 9.085 | 5.612 | 6.994 | 6.505 | 9.960 | 5.711 |
| IBS-C / *Blastocystis* - | Females | 7.092 | 1.373 | 0.060 | 5.925 | 3.853 | 0.216 | 2.710 | 3.961 | **0.004** | 7.066 | 3.339 | 0.161 |
| Control / *Blastocystis* - | 8.543 | 3.395 | 7.821 | 4.885 | 6.037 | 5.887 | 9.037 | 6.017 |
| IBS-C / *Blastocystis* - | Males | 6.243 | 1.173 | 0.077 | 7.081 | 4.219 | 0.347 | 4.180 | 5.416 | 0.086 | 6.039 | 1.068 | **0.008** |
| Control / *Blastocystis* - | 8.240 | 3.121 | 10.790 | 6.186 | 8.288 | 7.208 | 11.205 | 5.153 |
| IBS-C / *Blastocystis* - | All | 6.880 | 1.358 | 0.581 | 6.214 | 3.900 | 0.246 | 3.077 | 4.308 | 0.939 | 6.809 | 2.952 | 0.361 |
| IBS-C / *Blastocystis* + | 6.867 | 1.562 | 6.782 | 3.174 | 2.092 | 1.207 | 7.068 | 1.973 |
| IBS-C / *Blastocystis* - | Females | 7.092 | 1.373 | 0.283 | 5.925 | 3.853 | 0.182 | 2.710 | 3.961 | 0.459 | 7.066 | 3.339 | 0.266 |
| IBS-C / *Blastocystis* + | 6.807 | 2.228 | 7.870 | 4.430 | 2.546 | 1.471 | 7.781 | 2.162 |
| IBS-C / *Blastocystis* - | Males | 6.243 | 1.173 | 0.257 | 7.081 | 4.219 | 0.706 | 4.180 | 5.416 | 0.257 | 6.039 | 1.068 | 0.706 |
| IBS-C / *Blastocystis* + | 6.926 | 0.845 | 5.693 | 0.848 | 1.638 | 0.828 | 6.354 | 1.745 |
| Control / *Blastocystis* + | All | 7.240 | 2.434 | 0.102 | 9.689 | 6.605 | 0.923 | 7.493 | 8.095 | 0.699 | 6.064 | 2.979 | **0.001** |
| Control / *Blastocystis* - | 8.414 | 3.250 | 9.085 | 5.612 | 6.994 | 6.505 | 9.960 | 5.711 |
| Control / *Blastocystis* + | Females | 7.868 | 2.484 | 0.432 | 9.073 | 7.020 | 0.932 | 7.196 | 8.168 | 0.918 | 6.197 | 3.622 | 0.104 |
| Control / *Blastocystis* - | 8.543 | 3.395 | 7.821 | 4.885 | 6.037 | 5.887 | 9.037 | 6.017 |
| Control / *Blastocystis* + | Males | 6.717 | 2.367 | 0.120 | 10.201 | 6.506 | 0.726 | 7.740 | 8.389 | 0.586 | 5.953 | 2.484 | **0.001** |
| Control / *Blastocystis* - | 8.240 | 3.121 | 10.790 | 6.186 | 8.288 | 7.208 | 11.205 | 5.153 |

*Blastocystis* –: *Blastocystis*-negative; *Blastocystis* +: *Blastocystis*-positive; Sd: standard deviation