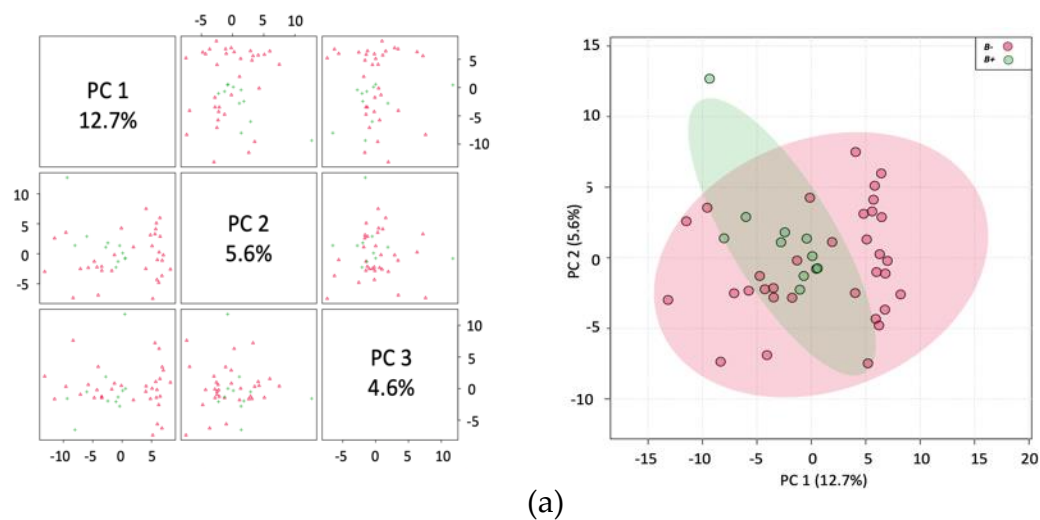
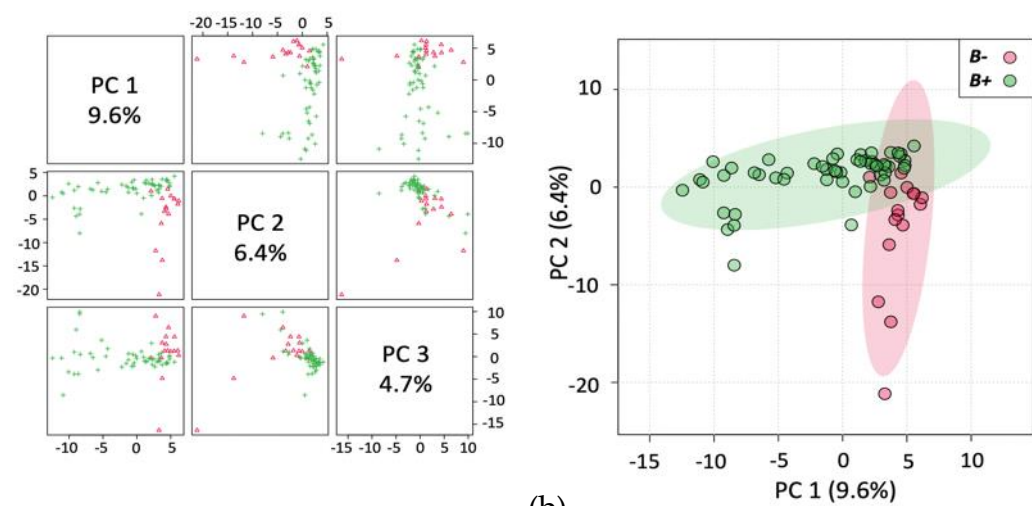


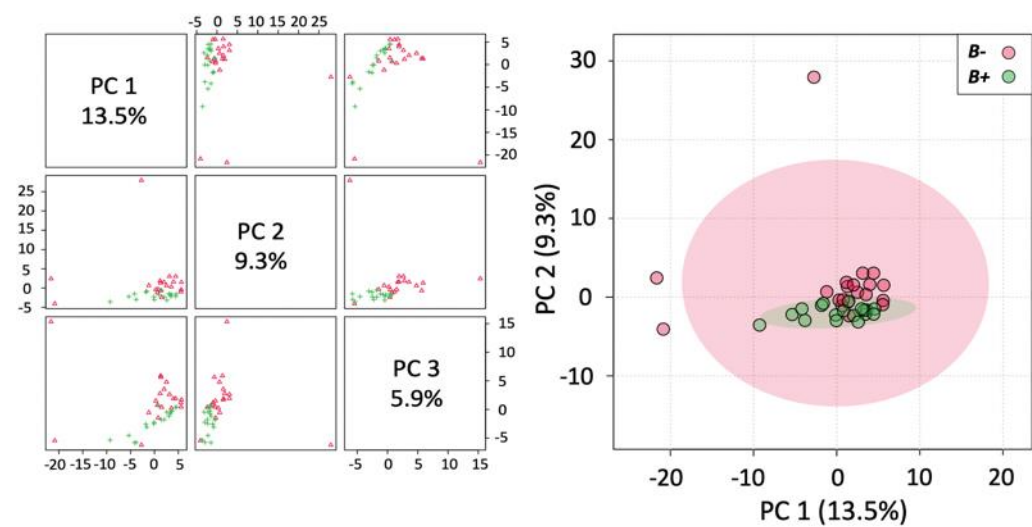
Figure S1. Example 1D ^1H NMR spectra from each region in B- and B+ individuals. *a)* Thailand B- *b)* Thailand B+ *c)* South Korea B- *d)* South Korea B+ *e)* Turkey B- *f)* Turkey B+



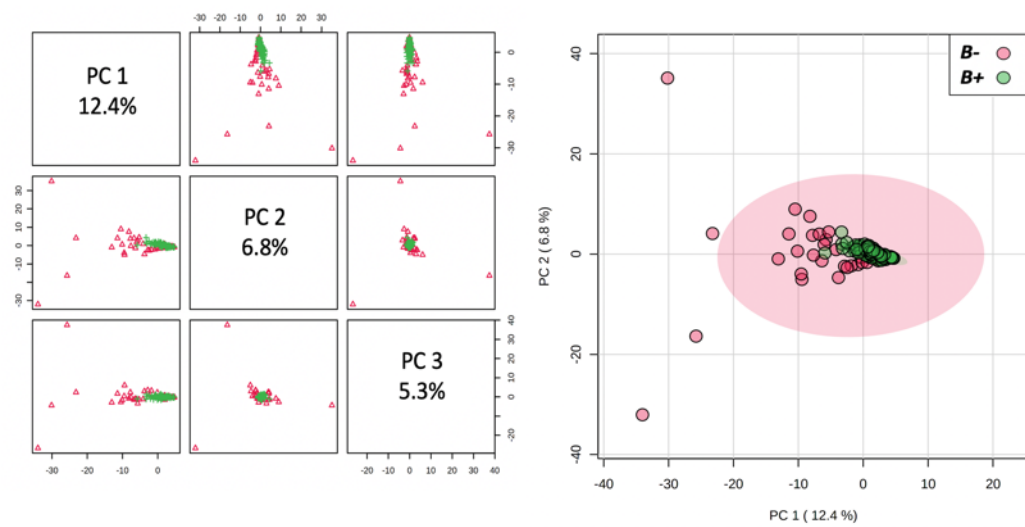
(a)



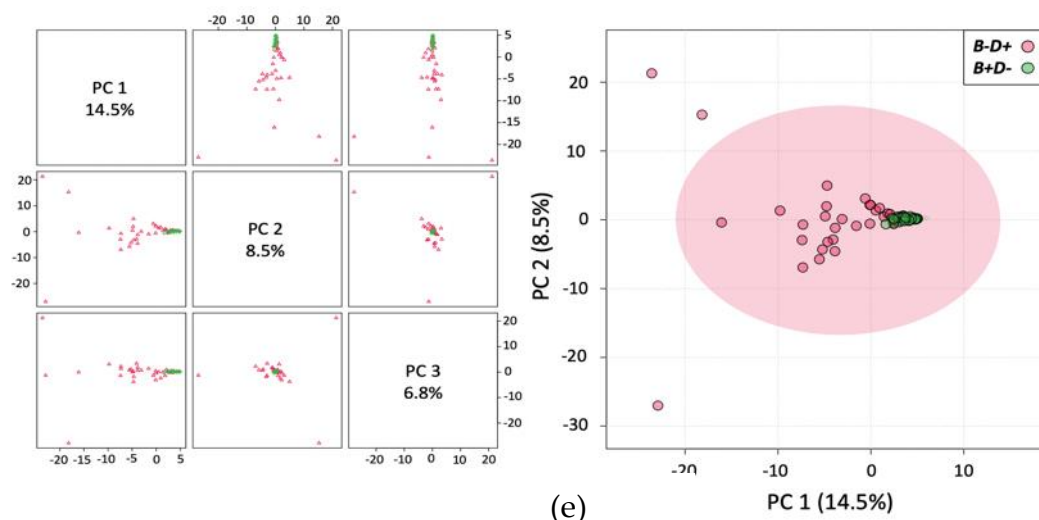
(b)



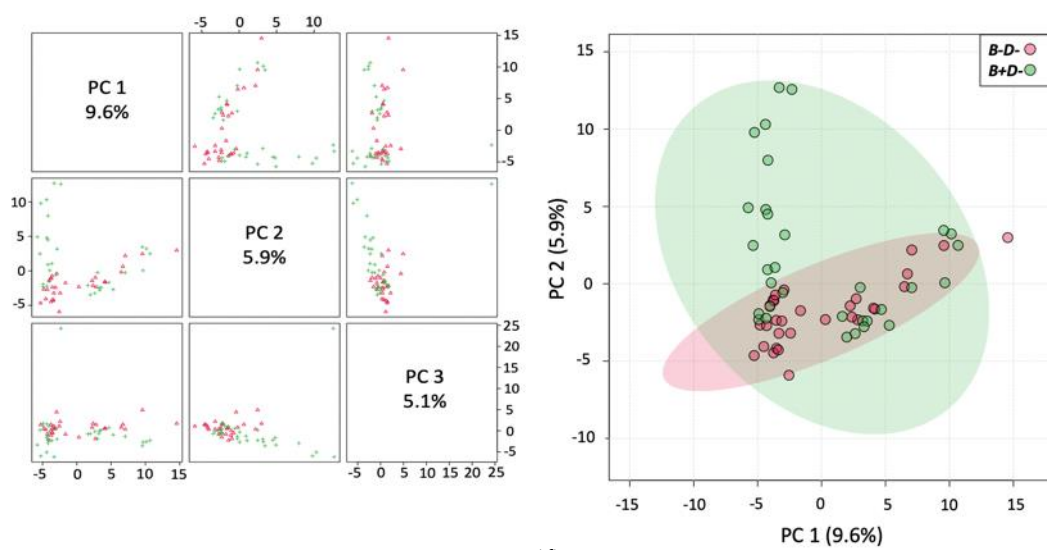
(c)



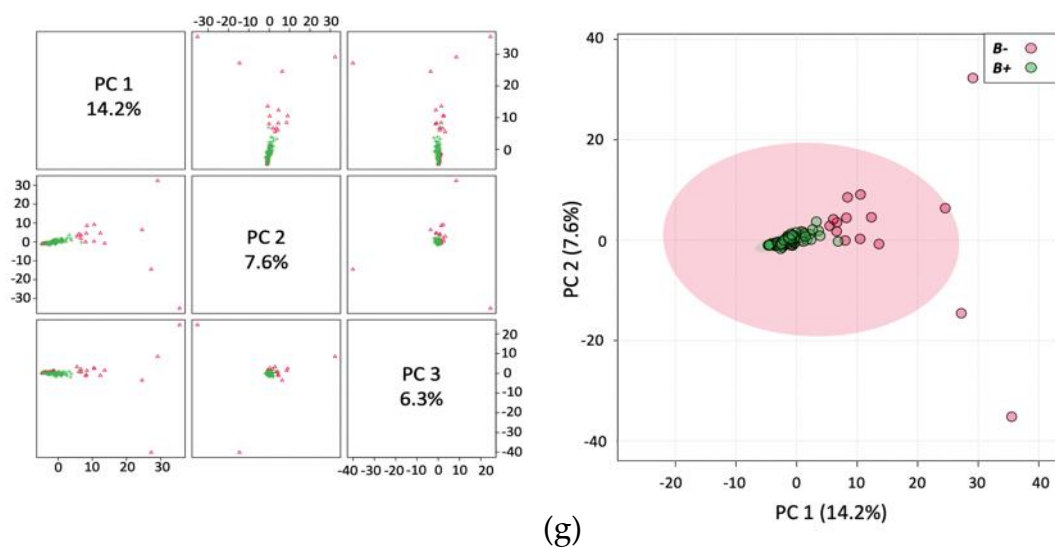
(d)



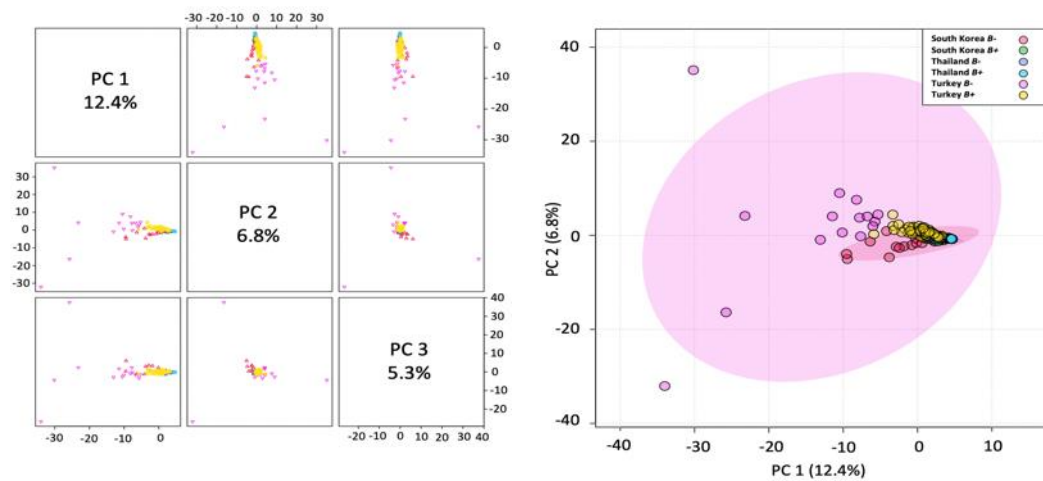
(e)



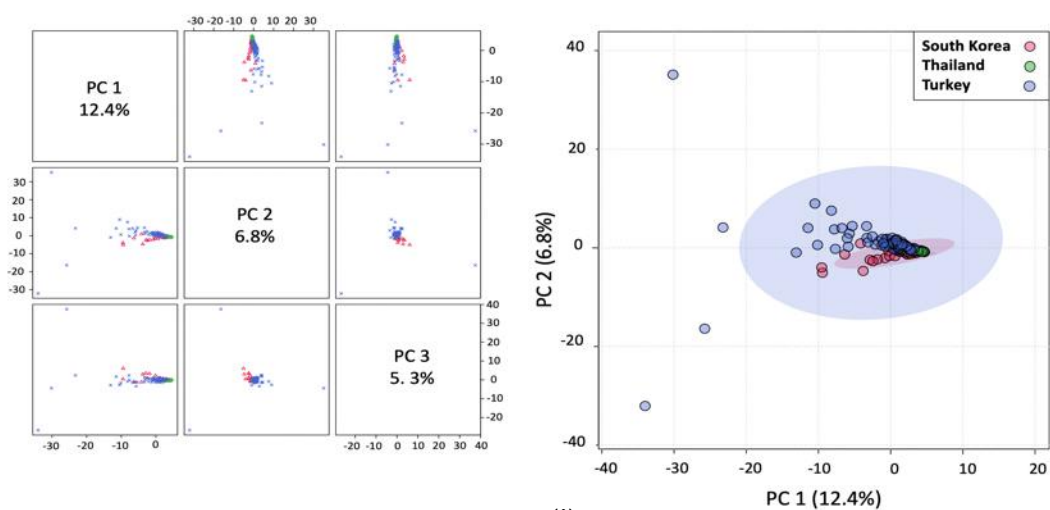
(f)



(g)



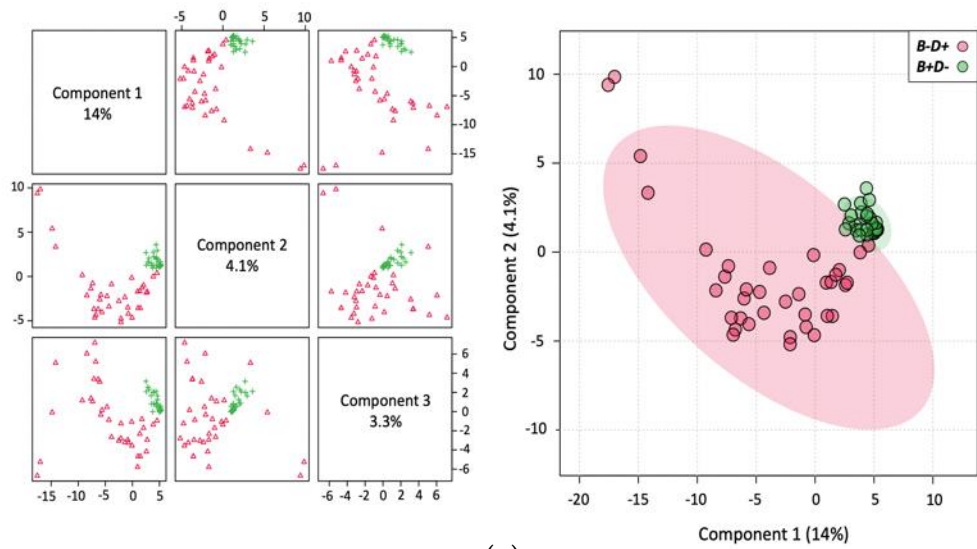
(h)



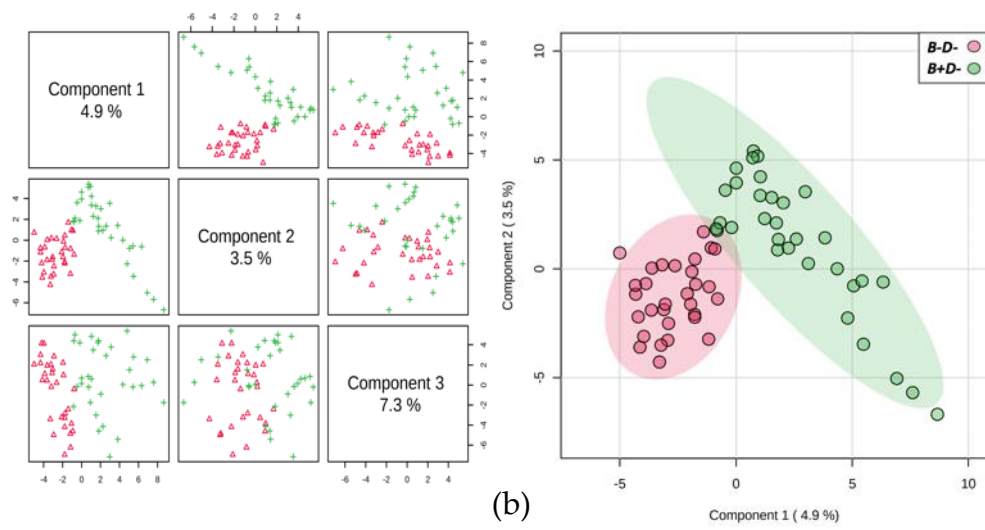
(i)

Figure S2. Multivariate analysis showing Unsupervised principal component analysis (PCA) of the normalized metabolite concentrations *a)* Thailand, *b)* Turkey, *c)*

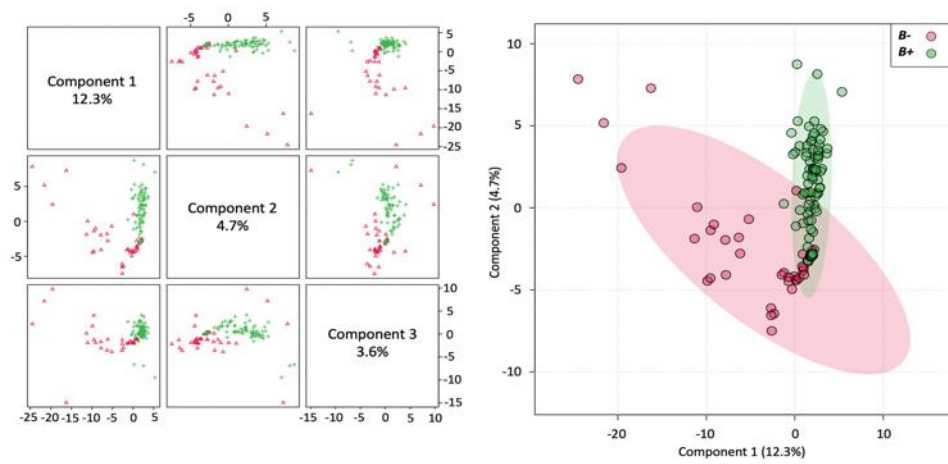
South Korea, *d*) B+ vs B-, *e*) D-B+ vs D+B-, *f*) D-B+ vs D-B-, *g*) B+ vs B- (Korea B-excluded), *h*) Country & *Blastocystis*, *i*) Country.



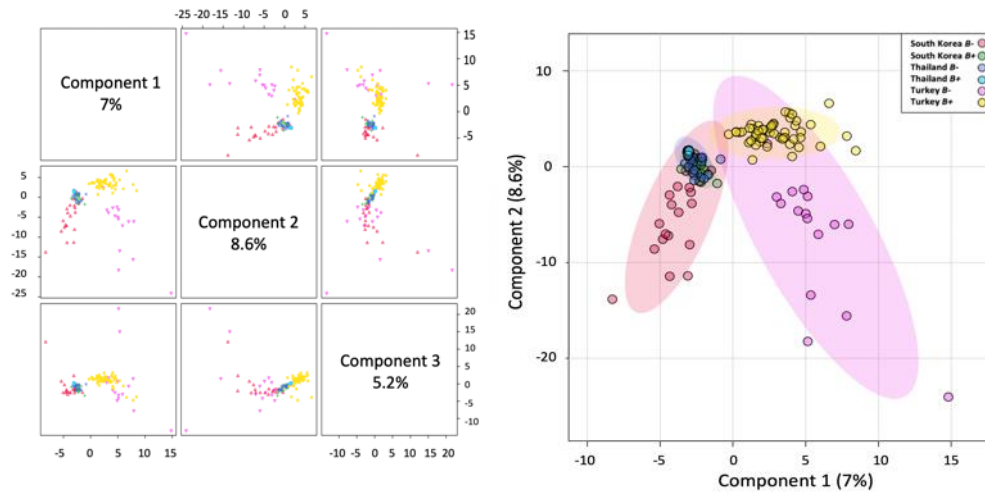
(a)



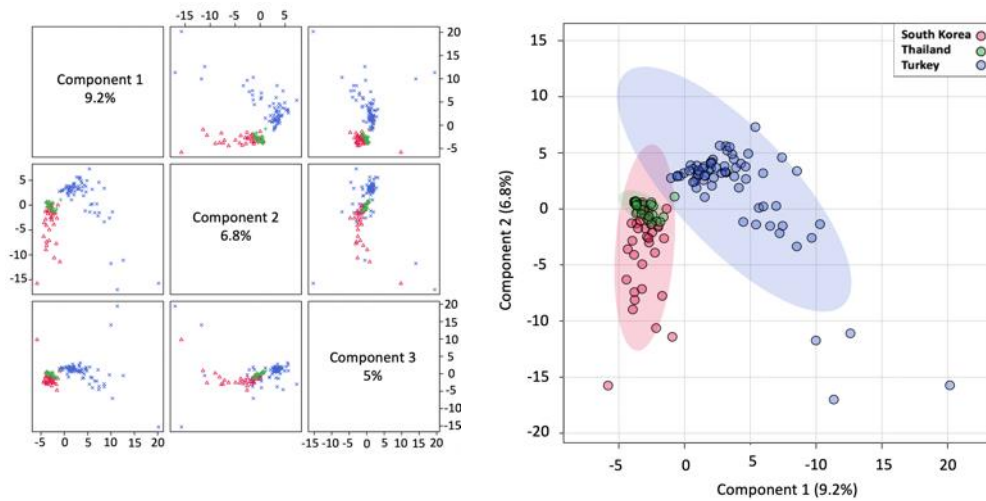
(b)



(c)

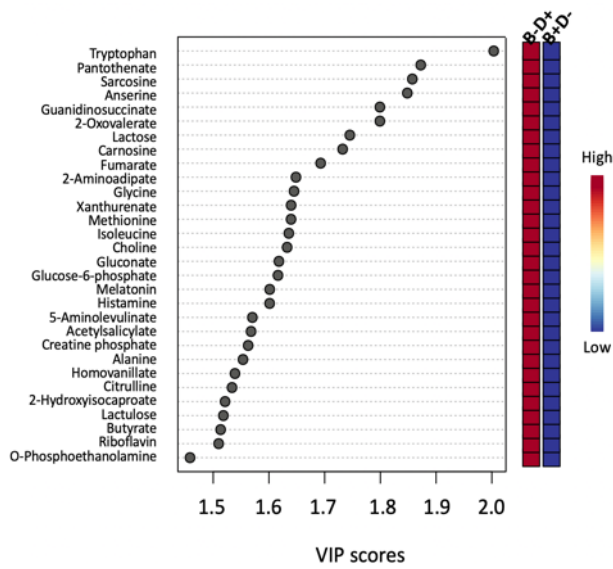


(d)

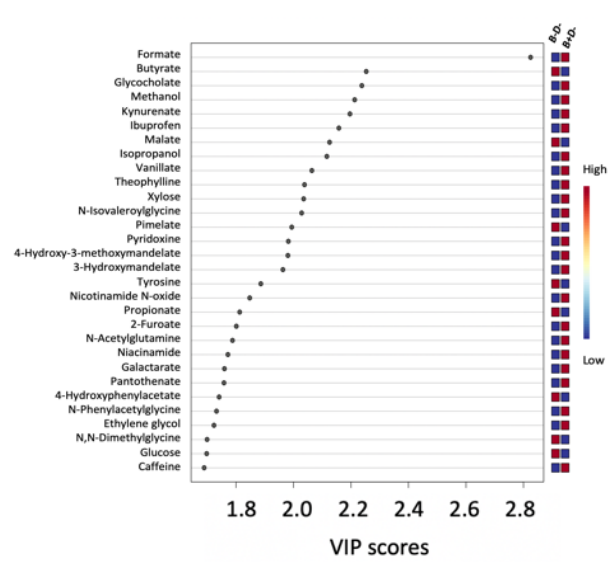


(e)

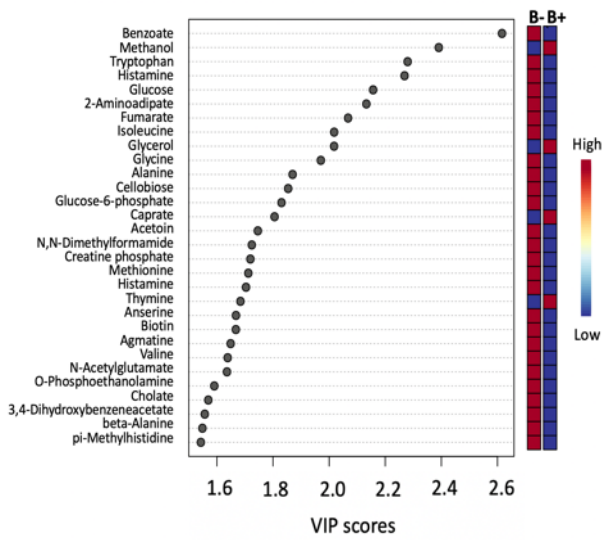
Figure S3. Multivariate analysis showing Partial Least Squares Discriminant Analysis (PLS-DA) *a)* D-B+ vs D+B-, *b)* D-B+ vs D-B-, *c)* B+ vs B- (Korea B- excluded), *d)* Country & *Blastocystis*, *e)* Country



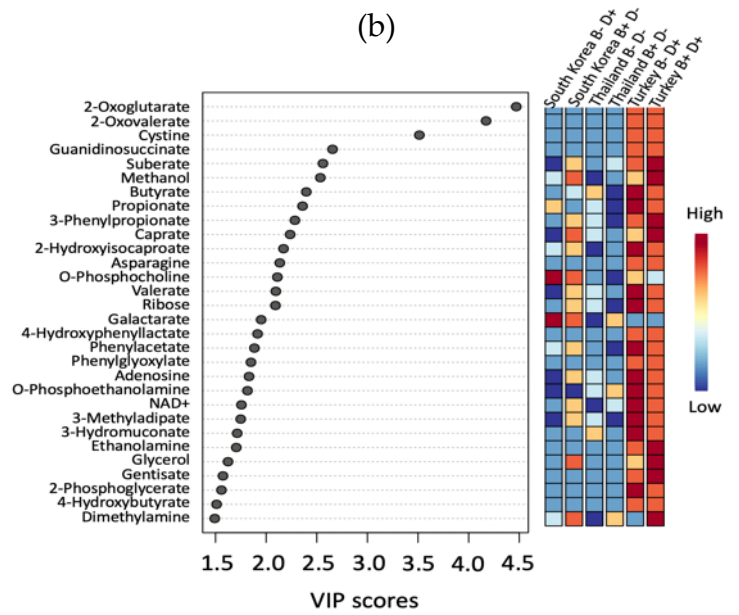
(a)



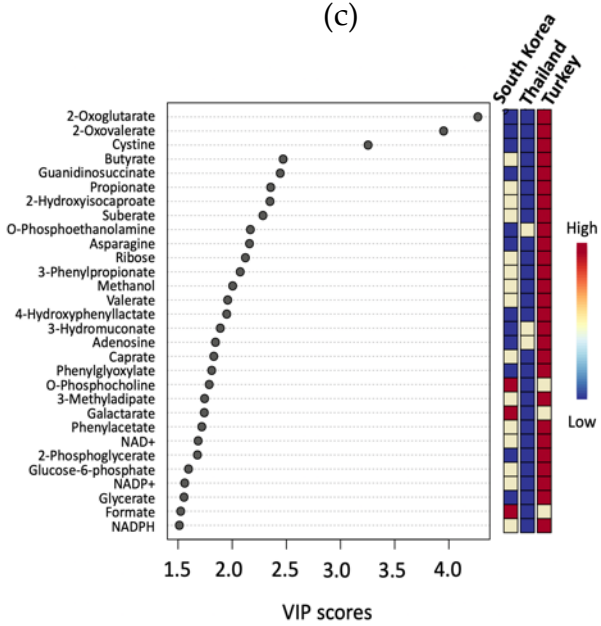
(b)



(c)



(d)



(e)

Figure S4. VIP score plot summarizing the 30 most important metabolites determined by the PLS-DA plot. The x-axis indicates the VIP score corresponding to significant metabolites on the y-axis. The coloured boxes on the right represent the relative concentration of the metabolite. *a)* D-B+ vs D+B-, *b)* D-B+ vs D-B-, *c)* B+ vs B- (Korea B- excluded), *d)* Country & *Blastocystis*, *e)* Country