

SUPPLEMENTAL MATERIAL

Supplementary Tables

Table S1: 16S copy numbers per ng of extracted DNA across samples. We present the data \pm SD.

	16S copy numbers per ng DNA
Muscle Untrained (N=8)	1258 \pm 179
Muscle Trained (N=8)	1257 \pm 89
Blood Untrained (N=6)	852 \pm 123
Blood Trained (N=6)	983 \pm 164
Muscle-EXT-NC (N=2)	97 \pm 8
Blood-EXT-NC (N=4)	75 \pm 25
qPCR-NC (N=1)	35

Table S2: According to the gain in VO_2max after training, the training efficiency of participants was classified as *High* ($\Delta\text{VO}_2\text{max} > 12$), *Medium* ($6 < \Delta\text{VO}_2\text{max} < 12$) or *Low* ($\Delta\text{VO}_2\text{max} < 6$).

Participant ID	$\Delta\text{VO}_2\text{max}$ (pre-post training)	Training Efficiency
11	9,94	Medium
15	12,84	High
16	15,85	High
17	10,65	Medium
18	12,93	High
20	1,95	Low
24	8,25	Medium
25	5,29	Low

Supplementary Figures and Figure Legends

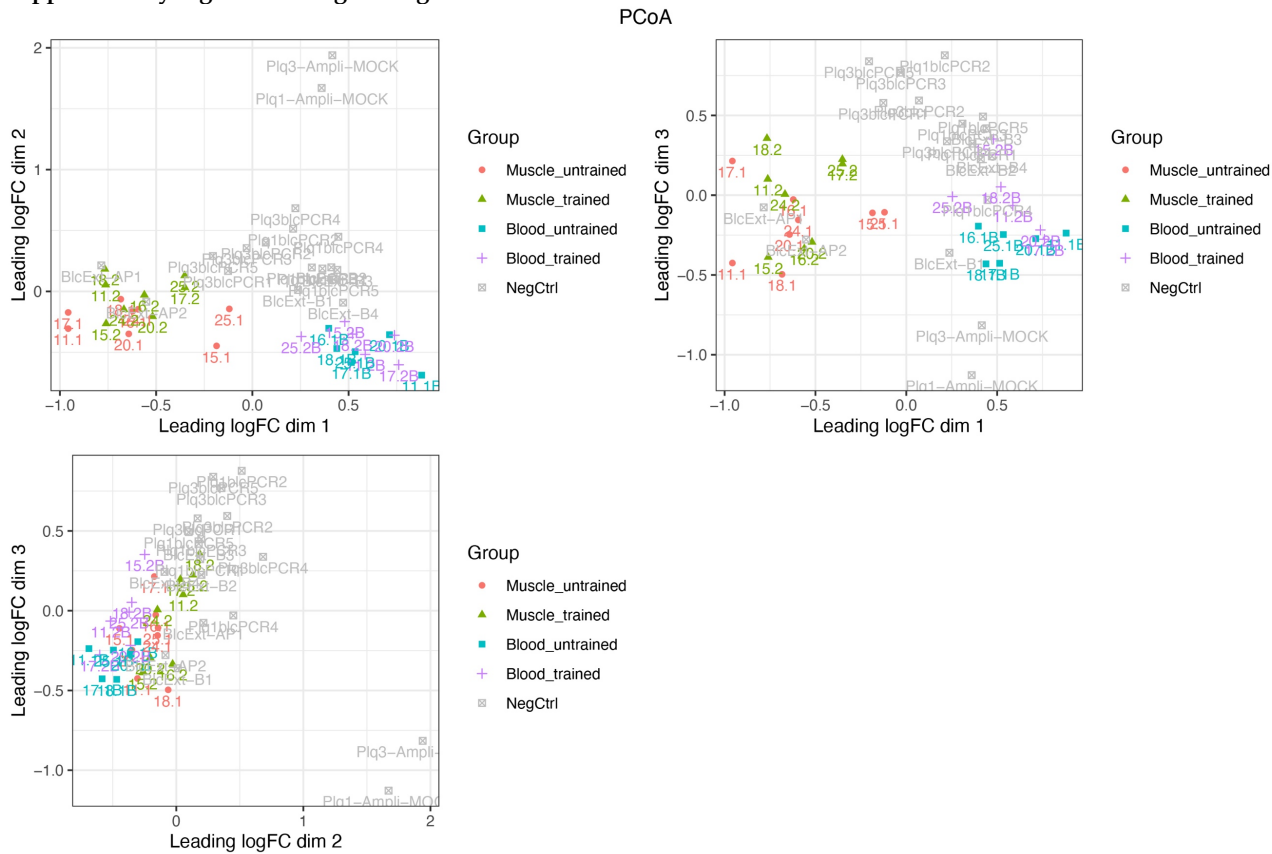


Figure S1: Multidimensional Analysis plot of samples and negative controls.

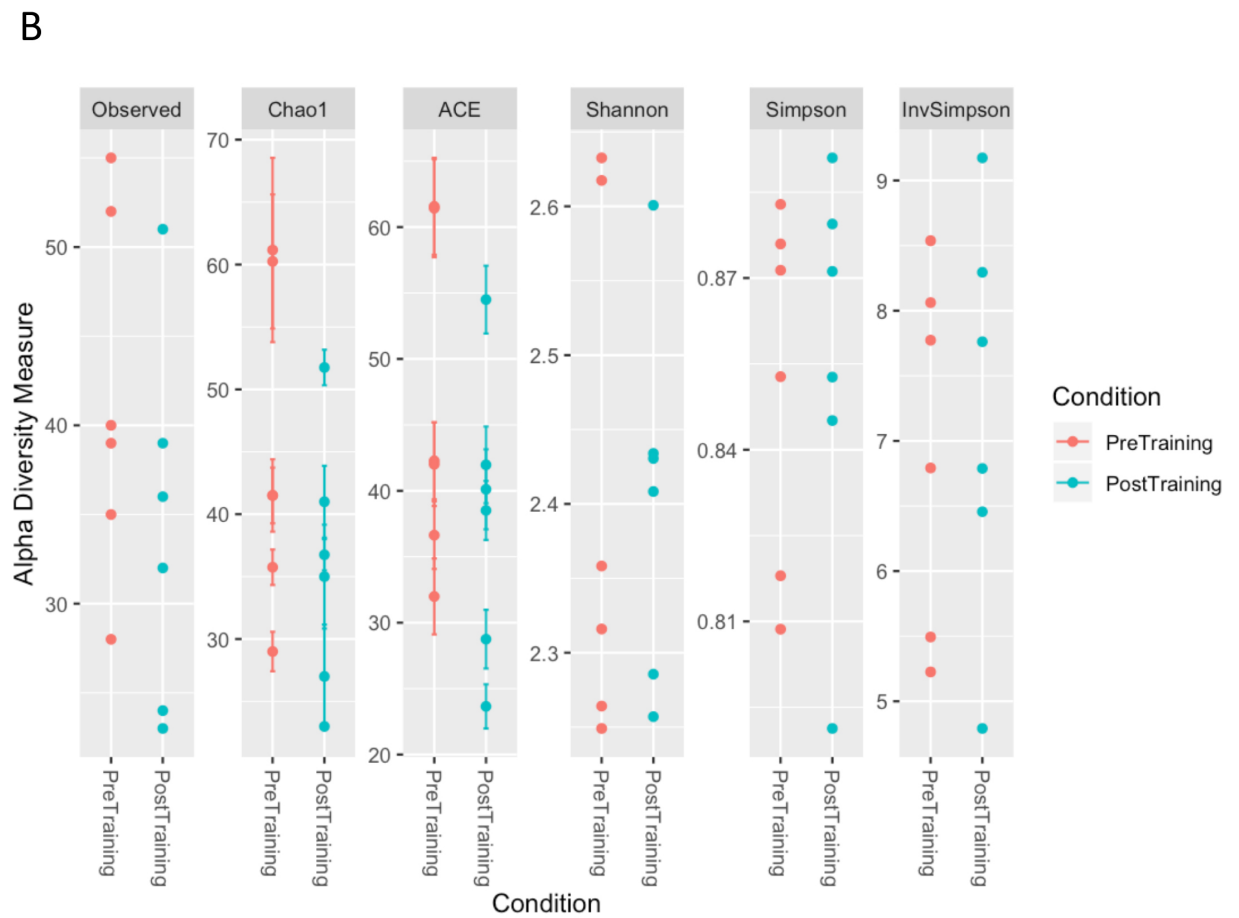
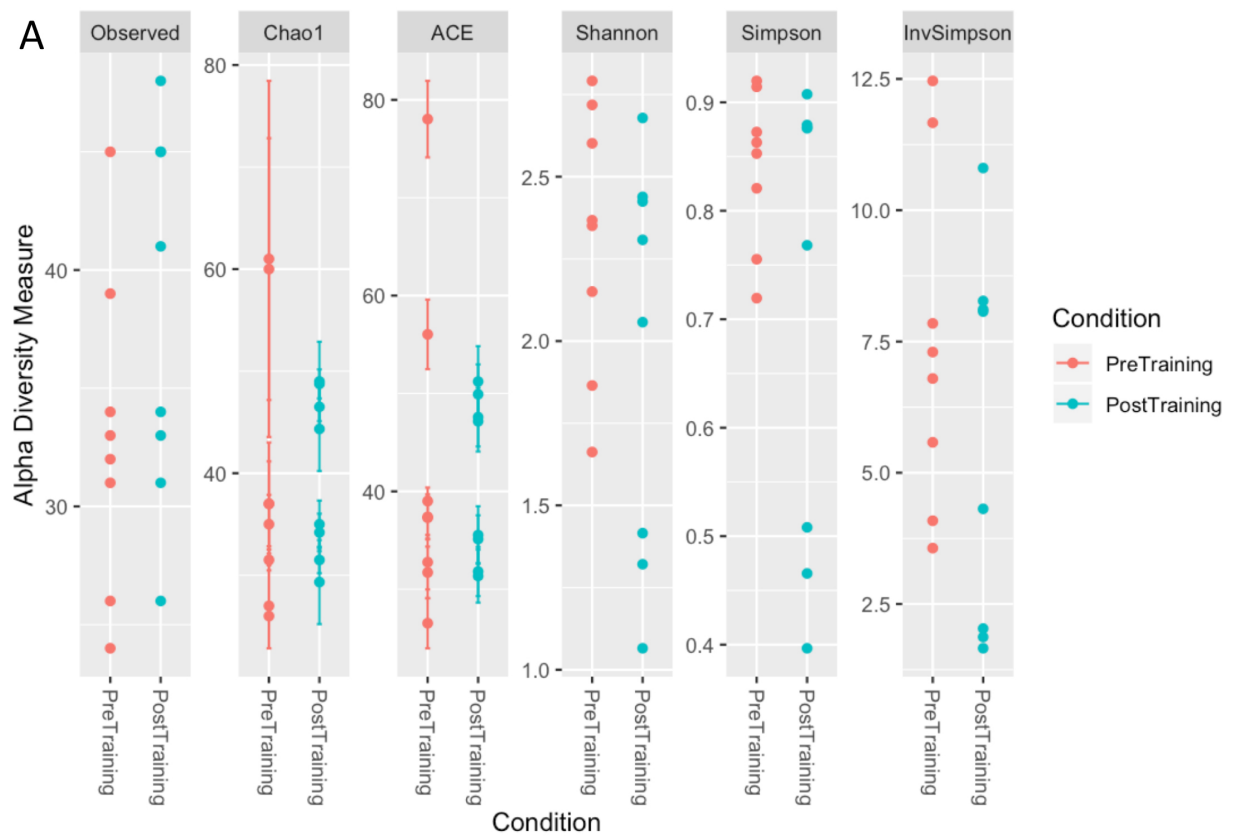


Figure S2: Alpha diversities in muscle (A) and blood (B).

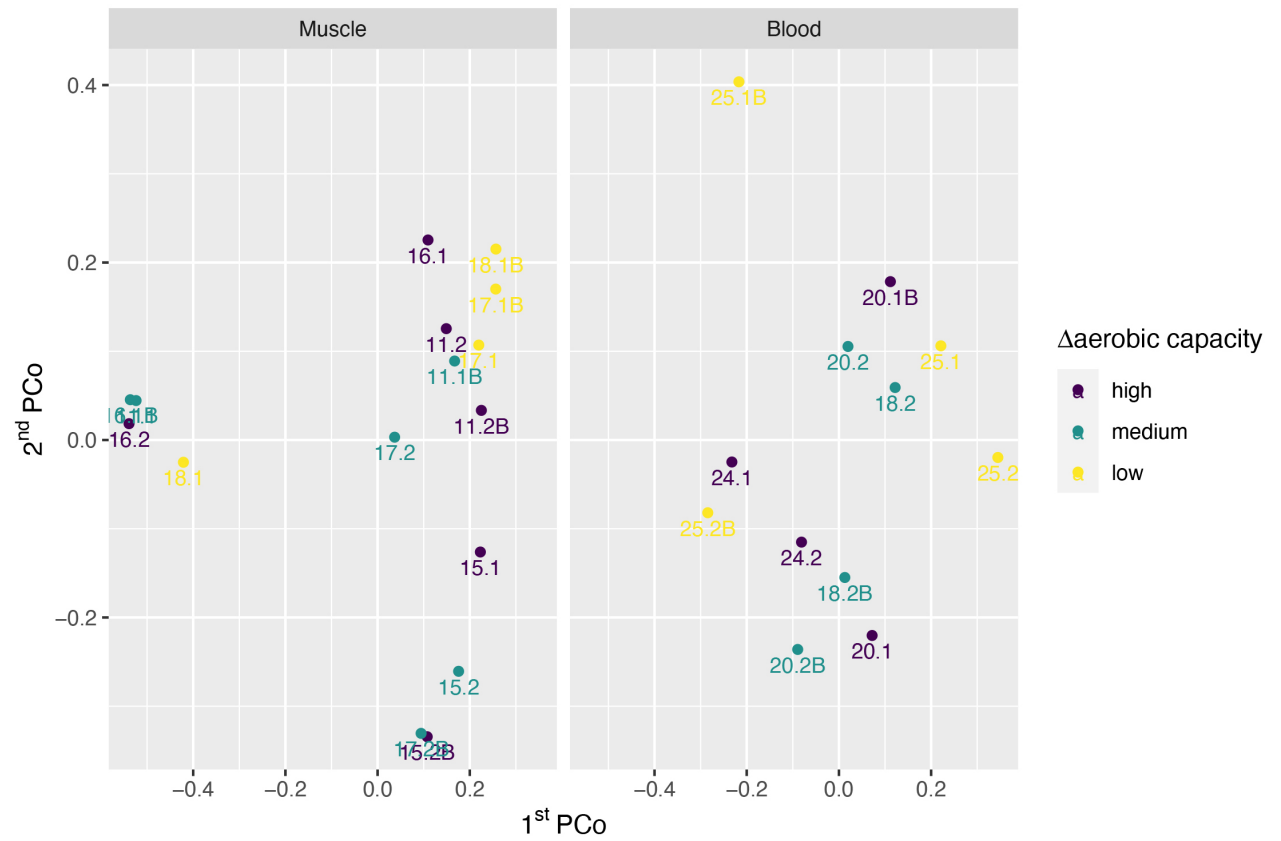


Figure S3: Multidimensional Analysis plot of samples coloured according to the aerobic capacity differences between untrained and trained conditions.