

## Aberystwyth University

### *Vitamin D status modulates innate immune responses and metabolomic profiles following acute prolonged cycling*

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## Supplementary Information

Table S1. Salivary flow rate and antimicrobial peptides responses according to plasma 25(OH)D concentration. Significant main effect of time (\*p < 0.05)

Immune measure	Pre-exercise	Post-exercise	1 h post-exercise	p value			partial eta squared		
				group	time	interaction	group	time	interaction
<b>Saliva flow rate (mL·min<sup>-1</sup>)</b>				0.224	0.267	0.381	0.070	0.061	0.045
Deficient	0.72 ± 0.32	0.60 ± 0.26	0.59 ± 0.22						
Non-deficient	0.49 ± 0.31	0.47 ± 0.31	0.49 ± 0.26						
<b>sLac concentration (mg·L<sup>-1</sup>)</b>				0.976	0.103	0.372	0.00007	0.160	0.073
Deficient	4.6 ± 1.4	4.8 ± 0.7	4.8 ± 0.5						
Non-deficient	4.3 ± 1.1	5.2 ± 1.0	5.1 ± 1.0						
<b>sLac secretion rate (µg·min<sup>-1</sup>)</b>				0.437	0.416	0.371	0.047	0.065	0.073
Deficient	2.8 ± 1.0	2.5 ± 0.8	2.0 ± 0.4						
Non-deficient	3.0 ± 2.0	3.0 ± 1.9	3.1 ± 1.4						
<b>sLac:osmolality (mg·mosmol<sup>-1</sup>)</b>				0.458	0.014*	0.481	0.047	0.297	0.059
Deficient	0.06 ± 0.02	0.05 ± 0.01	0.05 ± 0.01						
Non-deficient	0.06 ± 0.02	0.06 ± 0.02	0.06 ± 0.02						
<b>sLys concentration (mg·L<sup>-1</sup>)</b>				0.521	0.649	0.760	0.032	0.023	0.013
Deficient	29.0 ± 18.9	28.2 ± 21.8	19.7 ± 12.1						
Non-deficient	18.9 ± 11.6	18.7 ± 12.2	19.8 ± 13.9						
<b>sLys secretion rate (µg·min<sup>-1</sup>)</b>				0.822	0.546	0.518	0.004	0.049	0.046
Deficient	15.7 ± 12.6	13.7 ± 12.2	9.2 ± 5.3						
Non-deficient	11.4 ± 7.8	12.6 ± 12.0	13.2 ± 10.0						
<b>sLys:osmolality (mg·mosmol<sup>-1</sup>)</b>				0.953	0.208	0.733	0.0003	0.127	0.016
Deficient	0.34 ± 0.28	0.26 ± 0.28	0.27 ± 0.17						
Non-deficient	0.31 ± 0.19	0.26 ± 0.15	0.28 ± 0.17						