



Supplementary Material

Table 1. VitD levels (ng/mL) measured during the soccer season 2017/2018. Light grey cells represent insufficient/deficient levels (<30 ng/mL). Dark grey cells represent deficient vitD levels (<20 ng/mL). Red numbers indicate that the corresponding soccer player was on an injury period. The last two rows represents the average vitD values and the corresponding standard deviations.

	05.07.17	13.09.17	29.11.17	15.01.18	06.03.18	24.04.18	10.07.18	15.08.18
Player1	24.4	25.2	23	26.1	23	26.9	27.7	28.8
Player2	42.1	35.3	31.3	21	24.9	23.4	50.3	36.3
Player3	62.4	50.2	36.9	38.1	28.8	33.5		
Player4	25.9	25.4	23	27.2			33.2	30.7
Player5	23.1	27.8	26.6	18.6				
Player6	53.6	32.4	23.3	18.8	18.7	23.9	68.3	36.4
Player7	29	23.5	21.3	24.7	24.1	26.7	38.8	
Player8	65.1	40.7	40.4	45.6	32.7	28.4	55	
Player9	34.1	30.3	39.2	20.7	21.4	26.2	52.7	32.7
Player10	26.6	28.4		18	21.4		52.6	32.8
Player11	22	28.3	25.9	17.7	19	24.2	23.5	
Player12	52.9	42	37.1	36.7	29.5	32.8	55.2	36.3
Player13	44.6	41	41.9	37.8	38.6	35.3		40.3
Player14	28.8	31.2	24.6	16.3	18.1	23.4	50.1	35.5
Player15	18.1	17.3	20.2	14.7	20.4	15.7		19.9
Player16			17.6	17.1	11.7			
Player17		23.1	19.5	26	22.9	27.4		34.7
Player18	36.9	33	31.5	33.2	24.7	32.8	42.1	35.6
Player19	35.2			22.7	25.4	29.7	41.5	33.8
Player20	18.9	12.9	13.6	9.1	7.9		19.8	15.9
Player21	27.7	29.9	25.7	17.7	22.1	27.1	47.9	
Player22	24.4		26	28.7	29	35.6	28.6	35.3
Player23	34.2	38.3	35.4	31.9	24.8	27.6	41	40.1
Player24			11.3	14.1	5.7			
Player25	49.2	35.2	33	23.9	22.5	26.7		
Player26		42.5	37.5	33.2	23.5	31.6	65.2	43.3
Player27	38.9	34.6	29.9	25.4	24.6	32.6	52.6	36.6
Player28		24.7	29.1	20.5	21.7	23.5	27.7	
Player29	60.5	37.4	34	36.6	25.5	29.7	51.3	34.8
Average	36.6	31.6	28.1	24.9	22.7	28.0	44.1	33.7
STD	14.2	8.5	8.2	8.8	6.8	4.7	13.4	6.5

Table 2. CK levels (U/L) measured during the soccer season 2017/2018. Grey cells represents the levels exceeding the 195 U/L normal clinical limit. Percentages in the third to last row indicate the fraction of measurements exceeding the 195 U/L limit. Red numbers indicate that the corresponding soccer player was on an injury period. The last two rows represents the average CK values and the corresponding standard deviations.

	05.07.17	13.09.17	29.11.17	15.01.18	06.03.18	24.04.18	10.07.18	15.08.18
Player1	233	219	217	227	321	213	518	269
Player2	162	249	171	292	327	161	404	572
Player3	214	294	296	143	508	195		
Player4	191	488	433	289			400	361
Player5	420	260	229	286				
Player6	692	791	454	662	339	659	842	286
Player7	537	215	233	265	148	192	391	
Player8	202	155	246	138	171	162	377	
Player9	906	156	203	184	180	206	182	327
Player10	217	185		234	274		367	194
Player11	509	292	283	297	292	254	1195	
Player12	400	222	208	326	210	266	1240	357
Player13	520	236	447	163	181	211		257
Player14	325	257	491	177	228	180	315	263
Player15	283	455	1479	301	382	968		256
Player16			552	232	582			
Player17		348	419	197	256	114		444
Player18	303	678	207	156	175	194	454	535
Player19	275			457	355	289	717	403
Player20	242	678	649	757	413		2018	158
Player21	164	140	128	103	129	236	167	
Player22	176	290	183	115	219	225	393	234
Player23	247	107	253	185	163	106	341	92
Player24			754	476	586			
Player25	153	349	626	563	1209	620		
Player26		326	610	294	346	296	298	321
Player27	272	269	628	168	300	373	624	271
Player28		74	319	121	99	149	249	
Player29	343	200	257	115	140	124	299	296
>195 U/L	79.2 %	76.9%	88.9%	58.7%	66.6%	56.6%	90.5%	89.5%
Average	332.7	305.1	406.5	273.2	316.0	277.9	561.5	310.3
STD	185.7	179.0	278.0	164.7	221.2	204.7	443.2	118.5

Table 3. ROS levels (Car/U) measured during the soccer season 2017/2018. Grey cells represents the levels exceeding the 300 Car/U normal clinical limit. Percentages in the third Table 300. Car/U limit. Red numbers indicate that the corresponding soccer player was on an injury period. The last two rows represents the average ROS values and the corresponding standard deviations.

	05.07.17	13.09.17	29.11.17	15.01.18	06.03.18	24.04.18	10.07.18	15.08.18
Player1	240	233	271	303	301	223	282	258
Player2	313	332	322	372	348	249	311	359
Player3	231	291	237	312	293	226		
Player4	320	301	377	368			266	261
Player5	280	247	279	275				
Player6	271	385	300	308	247	230	310	250
Player7	337	309	393	331	371	204	283	
Player8	187	225	259	343	294	213	296	
Player9	283	310	272	272	362	228	278	317
Player10	192	244		211	220		185	180
Player11	359	379	306	348	377	265	302	
Player12	345	372	409	353	363	258	315	314
Player13	199	258	341	258	281	179		239
Player14	267	334	411	382	321	203	315	293
Player15	342	373	383	381	350	254		288
Player16			301	300	299			
Player17		235	281	290	294	169		222
Player18	224	267	354	316	390	236	223	261
Player19	270			291	336	210	283	329
Player20	336	301	272	311	301		279	244
Player21	313	389	347	359	375	296	301	
Player22	286	319	272	303	275	215	283	291
Player23	212	269	296	356	319	193	250	226
Player24			324	434	358			
Player25	263	287	383	302	276	219		
Player26		299	306	337	292	211	260	262
Player27	257	300	297	341	318	251	267	253
Player28		231	318	294	355	193	220	
Player29	352	296	313	281	309	234	251	261
>300 Car/U	37.5%	50.0%	59.2%	72.4%	63.0%	0%	28.6%	21.1%
Average	278.3	299.5	319.4	321.8	319.4	224.3	274.2	270.2
STD	53.4	50.5	48.2	45.2	42.5	29.4	34.0	42.9

Table 4. T/C ratios measured during the soccer season 2017/2018. Value in grey cells represents T/C ratio consistent with an overtraining risk (<0.76). Red numbers indicate that the corresponding soccer player was on an injury period. The last two rows represents the average T/C ratio and the corresponding standard deviation.

	05.07.17	13.09.17	29.11.17	15.01.18	06.03.18	24.04.18	10.07.18	15.08.18
Player1	2.17	1.69	1.89	1.77	1.60	1.69	1.61	1.33
Player2	1.05	1.02	1.40	1.16	0.89	1.13	0.71	0.92
Player3	1.03	0.78	0.83	1.36	1.36	1.19		
Player4	1.32	1.07	1.51	1.26			1.00	0.96
Player5	1.96	0.98	1.14	1.04				
Player6	1.14	0.94	1.07	0.99	1.00	1.14	0.96	0.98
Player7	0.95	0.88	1.33	1.64	1.07	1.30	0.90	
Player8	0.46	1.17	1.32	1.10	1.27	1.48	0.74	
Player9	0.68	0.67	1.15	0.60	0.82	0.81	1.03	0.81
Player10	0.97	1.09		1.15	0.79		1.65	1.26
Player11	0.75	0.84	1.62	2.71	1.18	0.94	0.74	
Player12	1.27	1.61	1.32	1.59	0.88	0.87	0.82	1.58
Player13	1.23	1.21	1.18	1.92	0.84	1.02		1.13
Player14	1.40	1.47	1.02	1.34	0.93	1.62	0.74	1.53
Player15	2.31	1.04	1.26	1.79	1.07	1.08		1.98
Player16			1.12	1.03	0.91			
Player17		1.40	1.06	1.34	0.88	1.34		1.02
Player18	0.91	1.09	0.80	1.01	0.86	0.94	1.08	0.99
Player19	0.90			0.91	1.06	1.13	0.98	1.37
Player20	5.98	1.27	1.28	1.15	1.28		1.16	3.72
Player21	0.95	1.28	1.22	1.35	1.62	1.17	0.99	
Player22	3.18	1.00	1.11	1.06	0.92	1.02	1.20	1.36
Player23	1.95	1.69	1.76	2.58	1.46	1.58	1.27	1.42
Player24			2.07	1.93	2.12			
Player25	1.73	1.07	1.08	1.14	0.92	0.96		
Player26		1.35	1.31	1.64	1.36	1.26	1.35	1.70
Player27	1.66	1.70	1.18	1.30	1.08	0.92	1.50	1.59
Player28		0.64	1.04	0.73	0.51	1.05	0.65	
Player29	0.81	0.91	1.24	1.62	0.94	1.09	1.48	0.99
Average	1.53	1.15	1.27	1.39	1.10	1.16	1.07	1.40
STD	1.13	0.30	0.29	0.48	0.33	0.24	0.30	0.64