

Supplemental Table 3: Serum DBP and vitamin D parameters at baseline according to sex, BMI group, age group and season

	Sex		BMI group			Age group			
	Females	Males	< 25 kg/m ²	25 – 29.9 kg/m ²	> 30 kg/m ²	< 50 years	50 – 59 years	60 – 69 years	> 70 years
Number of subjects	179	293	50	206	216	57	101	230	84
Sex (females / males)			27 / 23	71 / 135	81 / 135	21 / 36	29 / 72	89 / 141	40 / 44
BMI (kg/m²)	29.8 ± 4.6	30.1 ± 4.1	23.2 ± 1.3	27.8 ± 1.4	33.6 ± 3.0	31.4 ± 5.8	30.5 ± 3.8	29.9 ± 4.1	28.5 ± 3.5
Age (years)	62.8 ± 8.9	61.5 ± 8.5	64.3 ± 1.3	62.3 ± 8.6	61.2 ± 8.3	46.0 ± 3.2	55.8 ± 2.5	64.4 ± 2.7	73.8 ± 3.2
PTH (pmol/L)	5.7 (5.4, 6.0)	5.7 (5.4, 6.0)	5.9 (5.4, 6.4)	5.5 (5.2, 5.8)	5.9 (5.6, 6.2)	5.6 (5.2, 6.1)	5.5 (5.1, 5.9)	5.6 (5.3, 5.8)	6.5 (5.8, 7.2)
Serum albumin (g/L)	44.7 ± 2.3	45.5 ± 2.2 *	44.8 ± 2.0	45.4 ± 2.3	45.1 ± 2.3	45.6 ± 1.9	45.8 ± 2.3	45.0 ± 2.3	44.8 ± 2.1 *
Serum DBP (µmol/L)	3.8 ± 0.6	3.6 ± 0.5 *	3.8 ± 0.5	3.7 ± 0.6	3.6 ± 0.6 †	3.8 ± 0.5	3.7 ± 0.6	3.7 ± 0.6	3.7 ± 0.5
Serum total 25(OH)D (nmol/L)	64.5 ± 22.8	58.4 ± 20.5 †	65.3 ± 20.0	61.1 ± 21.1	59.3 ± 22.3	53.3 ± 22.7	58.7 ± 22.9	62.1 ± 20.5	64.2 ± 20.9 *
Serum calculated free 25(OH)D (pmol/L)	21.2 ± 7.3	19.9 ± 6.7	21.7 ± 6.7	20.4 ± 7.2	20.2 ± 6.9	17.5 ± 6.9	19.6 ± 6.8	21.1 ± 6.7	21.6 ± 7.2 *
Serum calculated bio-available 25(OH)D (nmol/L)	8.6 ± 3.0	8.2 ± 2.7	8.8 ± 2.7	8.4 ± 2.9	8.2 ± 2.8	7.2 ± 2.8	8.1 ± 2.7	8.6 ± 2.7	8.7 ± 3.0 *
Serum directly measured free 25(OH)D (pmol/L)	13.7 ± 4.1	13.7 ± 4.3	13.6 ± 3.9	14.1 ± 4.3	13.3 ± 4.3	12.1 ± 3.8	13.9 ± 4.8	13.9 ± 4.2	14.6 ± 3.6 *

BMI, body mass index; DBP, vitamin D binding protein; 25(OH)D, 25-hydroxyvitamin D

* $P < 0.001$. † $P < 0.05$. Independent sample t-test for sex. Linear trend across BMI and age groups.